VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA

SELF ASSESSMENT REPORT(TIER - I) FOR Electrical Engg.

Part A : Institutional Information

1 Name and Address of the Institution

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA,
PO. BURLA ENGINEERING COLLEGE DIST. SAMBALPUR (ODISHA)

2 Name and Address of Affiliating University

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY

3 Year of establishment of the Institution:

2009

4 Type of the Institution:

○ Institute of National Infortance	○ Autonomous
○ University	○ Any other(please specify)
○ Deemed University	

5 Ownership Status:

○ Central Government	☐ Trust
◉ State Government	☐ Society
○ Government Aided	☐ Section 25 Company
○ Self financing	☐ Any Other(Please Specify)

6 Other Academic Institutions of the Trust/Society/Company etc., if any

Name of Institutions	Year of Establishment	Programs of Study	Location

7 Details of all the programs being offered by the Institution under consideration:

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
M.Tech Power System	PG	1969	1969	18	No	18	Granted accreditation for 3 years for the period (specify period)	2013	2020	No	2
M.Tech Power Electronics and Control Drives	PG	2011	2011	18	No	18	Eligible but not applied	--	--	No	2
M.Tech Control and Instrumentation	PG	2020	2020	18	No	18	Eligible but not applied	--	--	No	2
B.Tech Electrical Engineering	UG	1956	1956	20	Yes	120	Granted accreditation for 6 years for the period (specify period)	27/07/2006	30/06/2022	Yes	4

Sanctioned Intake for Last Five Years for the B.Tech Electrical Engineering

Academic Year	Sanctioned Intake
2023-24	120
2022-23	120
2021-22	120
2020-21	120
2019-20	120
2018-19	120

8 Programs to be considered for Accreditation vide this application:

S No	Level	Discipline	Program
1	Under Graduate	Engineering & Technology	Civil Engg.
2	Under Graduate	Engineering & Technology	Electrical Engg.
3	Under Graduate	Engineering & Technology	Mechanical Engg.
4	Under Graduate	Engineering & Technology	Production Engg.
5	Under Graduate	Engineering & Technology	Electronics & Telecommunications Engineering

9 Total number of employees

A. Regular* Employees (Faculty and Staff):

Items	2023-24		2022-23		2021-22	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	119	122	122	124	124	125
Faculty in Engineering (Female)	56	56	56	56	56	56
Faculty in Maths, Science & Humanities teaching in engineering program (Male)	31	32	32	32	32	33
Faculty in Maths, Science & Humanities teaching in engineering program (Female)	6	6	6	6	6	6
Non-teaching staff (Male)	110	117	117	129	129	139
Non-teaching staff (Female)	11	11	11	11	11	11

B. Contractual* Employees (Faculty and Staff):

Items	2023-24		2022-23		2021-22	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	12	12	11	11	10	10
Faculty in Engineering (Female)	7	7	6	7	5	5
Faculty in Maths, Science & Humanities teaching in engineering Programs (Male)	10	10	11	11	9	9
Faculty in Maths, Science & Humanities teaching in engineering Programs (Female)	12	12	13	14	10	12
Non-teaching staff (Male)	60	76	76	91	91	114
Non-teaching staff (Female)	06	08	08	08	08	11

10 Total number of Engineering students:

Engineering and Technology- UG	☑ Shift1	☐ Shift2
Engineering and Technology- PG	☑ Shift1	☐ Shift2
Engineering and Technology- Polytechnic	☐ Shift1	☐ Shift2
MBA	☐ Shift1	☐ Shift2
MCA	☑ Shift1	☐ Shift2

Engineering and Technology- UG Shift-1

Course Name	2023-24	2022-23	2021-22
Total no. of Boys	2859	2790	2671
Total no. of Girls	1132	1025	962
Total	**3991**	**3815**	**3633**

Engineering and Technology- PG Shift-1

Course Name	2023-24	2022-23	2021-22
Total no. of Boys	149	197	240
Total no. of Girls	117	118	146
Total	**266**	**315**	**386**

Engineering and Technology- MCA Shift-1

Course Name	2023-24	2022-23	2021-22
Total no. of Boys	57	49	43
Total no. of Girls	21	20	17
Total	**78**	**69**	**60**

11 Vision of the Institution:

To emerge as an internationally acclaimed Technical University to impart futuristic technical education and creation of vibrant research enterprise to create quality engineers and researchers, truly world class leader and unleashes technological innovations to serve the global society and improve the quality of life.

12 Mission of the Institution:

The Veer Surendra Sai University of Technology, Odisha, Burla strives to create values and ethics in its products by inculcating depth and intensity in its education standards and need based research through

- Participative learning in a cross-cultural environment that promotes the learning beyond the class room.
- Collaborative partnership with industries and academia within and outside the country in learning and research.
- Encouraging innovative research and consultancy through the active participation and involvement of all faculty members.
- Facilitating technology transfer, innovation and economic development to flow as natural results of research where ever appropriate.
- Expanding curricula to cater broader perspectives.
- Creation of service opportunities for upliftment of the society at large.

13 Contact Information of the Head of the Institution and NBA coordinator, if designated:

Head of the Institution	
Name	Prof. Banshidhar Majhi
Designation	Vice Chancellor
Mobile No.	8056201404
Email ID	vc@vssut.ac.in

NBA Coordinator, If Designated

Name	Dr. Sasmita Behera
Designation	Assistant Professor
Mobile No.	9437367106
Email ID	sbehera_eee@vssut.ac.in

PART B: Criteria Summary

Critera No.	Criteria	Total Marks	Institute Marks
1	VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES	50	50.00
2	PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES	100	100.00
3	COURSE OUTCOMES AND PROGRAM OUTCOMES	175	175.00
4	STUDENTS' PERFORMANCE	100	93.02
5	FACULTY INFORMATION AND CONTRIBUTIONS	200	158.43
6	FACILITIES AND TECHNICAL SUPPORT	80	80.00
7	CONTINUOUS IMPROVEMENT	75	75.00
8	FIRST YEAR ACADEMICS	50	46.57
9	STUDENT SUPPORT SYSTEMS	50	50.00
10	GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES	120	120.00
	Total	**1000**	**948**

Part B : Criteria Summary

1 VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (50)

Tot

1.1 State the Vision and Mission of the Department and Institute (5)

In

Vision of the institute	To emerge as an internationally acclaimed Technical University to impart futuristic technical education and creation of vibrant research enterprise to create quality engineers and researchers, truly world class leader and unleashes technological innovations to serve the global society and improve the quality of life.
Mission of the institute	The Veer Surendra Sai University of Technology, Odisha, Burla strives to create values and ethics in its products by inculcating depth and intensity in its education standards and need based research through • Participative learning in a cross-cultural environment that promotes the learning beyond the class room. • Collaborative partnership with industries and academia within and outside the country in learning and research. • Encouraging innovative research and consultancy through the active participation and involvement of all faculty members. • Facilitating technology transfer, innovation and economic development to flow as natural results of research where ever appropriate. • Expanding curricula to cater broader perspectives. • Creation of service opportunities for upliftment of the society at large.
Vision of the Department	To be recognized as a centre of excellence in education and research in the field of Electrical Engineering by producing innovative, creative and ethical Electrical Engineering professionals for socio-economic development of society in order to meet the global challenges.
Mission of the Department	**Mission No.** / **Mission Statements** M1 – Maintaining state of the art research facilities to provide enabling environment to create, analyze, apply and disseminate knowledge. M2 – Fortifying collaboration with world class R&D organizations, educational institutions, industry and alumni for excellence in teaching, research and consultancy practices to fulfil ‘Make in India’ policy of the Government. M3 – Providing the students with academic environment of excellence, leadership, ethical guidelines and lifelong learning needed for a long productive career.

1.2 State the Program Educational Objectives (PEOs) (5)

In

PEO No.	Program Educational Objectives Statements
PEO1	To have basic and advanced knowledge in Electrical Engineering with specialized knowledge in design and commissioning of electrical systems/renewable energy systems comprising of generation, transmission and distribution to become eminent, excellent and skillful engineers.
PEO2	To succeed in getting engineering position with electrical design, manufacturing industries or in software and hardware industries, in private or government sectors, at Indian and in Multinational organizations.
PEO3	To have a well-rounded education that includes excellent communication skills, working effectively on team-based projects, ethical and social responsibility.
PEO4	To have the ability to pursue study in specific area of interest and be able to become successful entrepreneur.
PEO5	To have broad knowledge serving as foundation for lifelong learning in multidisciplinary areas to enable career and professional growth in top academic, industrial and government/corporate organizations.

1.3 Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders (15)

Inst

Locations where the Vision, Mission and PEOs are published and disseminated.

Sl. No.	Location	Institute		Department		
		Vision	Mission	Vision	Mission	PEOs
1	Institute Website/ Departmental Webpage	✓	✓	✓	✓	✓
2	Department Newsletter & Notice Board	✓	✓	✓	✓	✓
3	Course file			✓	✓	✓
4	Lab Manual			✓	✓	✓
5	Conference workshop/ Brochures	✓	✓	✓	✓	
6	Outside Department Office			✓	✓	✓
7	HOD Chamber			✓	✓	✓
8	Laboratories	✓	✓	✓	✓	✓

Vision, Mission and PEOs are also shared with all the internal and external stakeholders of the program during student orientation program, faculty meetings, alumni meeting, technical festival of the department, conferences and training and placement activities of the university.

1.4 State the process for defining the Vision and Mission of the Department, and PEOs of the program (15)

Inst

The vision and mission of the department are designed through a cumulative process of consulting all stakeholders of the department. It is ensured that the departments vision and mission must be parallelized with the vision and mission of the university. The steps involved in defining the vision. Mission and PEOs are given below.

Step 1 A committee is set up to propose the vision, mission, PEOs of the department.

Step 2 An workshop is conducted at the institute level organised by IQAC/ Dean, Academics/Dean, PGSR.

Step 3 The suggestions from Stake holders (Expert members, alumni, Faculties, students and parents) are considered while finalizing the vision, mission and PEOs of the department.

Step 4 The suggested draft of the vision, mission and PEOs is put in the meeting of Board of Studies (BoS) for their recommendations.

Step 5 The modified vision, mission and PEOs document is passed through the academic council meeting for necessary suggestions.

Step 6 The final vision, mission and PEOs are put on the Board of Management (BoM) meeting for their approval.

1.5 Establish consistency of PEOs with Mission of the Department (10)

Justification:

- ☐ By having a better environment and research facilities so that students can better analyze and apply knowledge (M1) which will make them eminent, excellent and skillful engineers (PEO1).
- ☐ Specialized knowledge in design and commissioning of electrical systems will increase the students analytical and professional skills (PEO1) that will help the students in the field of R&D organization, industry and educational institutions (M2).
- ☐ Providing an excellent academic environment and ethical guidelines (M3) is necessary for the students to work in different industries (software/hardware, govt/ private) (PEO2).
- ☐ Well grounded education and team based projects (PEO3) among students are essentially required to build up their entrepreneurship and leadership quality efficiently (M3).
- ☐ Collaboration with world class organizations, industry and educational institutions (M2) will enable students to pursue projects in multidisciplinary areas of interests in academic/corporate organizations (PEO5).
- ☐ With broad knowledge of foundation in multidisciplinary areas (PEO5) developed leadership quality, ethical guidelines and long productive career of the students (M3).
- ☐ Consultancy projects and Collaborative research (M2) will allow the students to pursue projects in specific areas of interest (PEO4).
- ☐ The collaboration with other educational institutions, industry (M2) will ensure to have better approachability in technical aspects (PEO1).

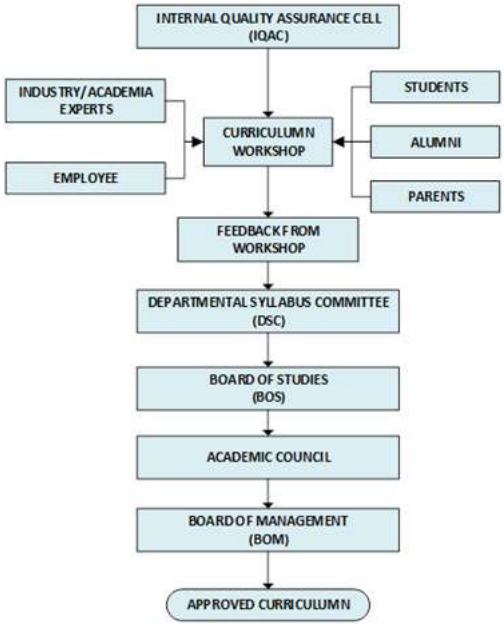
PEO Statements	M1	M2	M3
To have basic and advanced knowledge in Electrical Engineering with specialized knowledge in design and commissioning of electrical systems/renewable energy systems comprising of generation, transmission and distribution to become eminent, excellent and skillful engineers.	3	1	1
To succeed in getting engineering position with electrical design, manufacturing industries or in software and hardware industries, in private or government sectors, at Indian and in Multinational organizations.	1	3	2
To have a well-rounded education that includes excellent communication skills, working effectively on team-based projects, ethical and social responsibility.	2	2	3
To have the ability to pursue study in specific area of interest and be able to become successful entrepreneur.	1	3	3
To have broad knowledge serving as foundation for lifelong learning in multidisciplinary areas to enable career and professional growth in top academic, industrial and government/corporate organizations.	2	3	3

2 PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES (100) Total

2.1 Program Curriculum (30)

2.1.1 State the process for designing the program curriculum (10)

Inst



2.1.2 Structure of the Curriculum (5)

Ins

ID	Course Code	Course Title	Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	Theory Credits	Practical Credits	Total Credits
1	BEE2101	Basic Electrical Engineering	3	0	0	3	3	0	3
2	BPH2101	Physics	3	0	0	3	3	0	3
3	BHU2102	English for Business Communication	3	0	0	3	3	0	3
4	BMA2101	Mathematics-I	3	1	0	4	4	0	4
5	BME2101	Engineering Mechanics	3	0	0	3	3	0	3
6	BEE2191	Basic Electrical Engineering Laboratory	0	0	3	3	0	1.5	1.5
7	BPH2191	Physics Laboratory	0	0	3	3	0	1.5	1.5
8	BME2192	Workshop & Manufacturing Practices	0	0	3	3	0	1.5	1.5
9	BHU2191	Business Communication Laboratory	0	0	3	3	0	1.5	1.5
10	BIN2101	Induction Programme & Participation in Clubs/Societies	0	0	0	0	0	0	0
11	BEC2101	Basic Electronics	3	0	0	3	3	0	3
12	BCH2101	Chemistry	3	0	0	3	3	0	3
13	BCE2102	Basic Civil Engineering	3	0	0	3	3	0	3
14	BMA2201	Mathematics-II	3	1	0	4	4	0	4
15	BCS2102	Programming For Problem Solving	3	0	0	3	3	0	3
16	BEC2191	Basic Electronics Laboratory	0	0	3	3	0	1.5	1.5
17	BCH2191	Chemistry Laboratory	0	0	3	3	0	1.5	1.5
18	BCE2192	Engineering Graphics & Design	0	0	3	3	0	1.5	1.5
19	BCS2191	Programming Laboratory	0	0	3	3	0	1.5	1.5
20	BYG2201	Yoga	0	0	0	0	0	0	0
21	BHU2301	Organization Behaviour	3	0	0	3	3	0	3
22	BEE2302	Electrical Machines-I	3	0	0	3	3	0	3
23	BEE2303	Network Theory	3	0	0	3	3	0	3
24	BMA2301	Mathematics-III	3	1	0	4	4	0	4
25	BEE2305	Instrumentation & Sensor	3	0	0	3	3	0	3
26	BEE2392	Electrical Machines-I Laboratory	0	0	3	3	0	1.5	1.5
27	BEE2393	Network Theory Laboratory	0	0	3	3	0	1.5	1.5
28	BEE2394	Electrical Circuit Computation Laboratory	0	0	3	3	0	1.5	1.5
29	BEE2395	Instrumentation Laboratory	0	0	3	3	0	1.5	1.5
30	BNC2301	Essence of India Traditional Knowledge	0	0	0	0	0	0	0
31	BHU2303	Economics For Engineers	3	0	0	3	3	0	3
32	BEE2401	Electrical Machines-II	3	0	0	3	3	0	3
33	BEE2402	Electrical Power Generation Systems	3	0	0	3	0	3	3
34	BMA2401	Mathematics-IV	3	1	0	4	4	0	4

35	BEE2403	Analog And Digital Electronics Circuit	3	0	0	3	3	0	3
36	BEE2491	Electrical Machines Laboratory-II	0	0	6	6	0	3	3
37	BEE2492	Analog And Digital Electronic Circuits Laboratory	0	0	6	6	0	3	3
38	BNC2401	Environmental Science	0	0	0	0	0	0	0
39	BNC2402	Summer Internship/Training	0	0	0	0	0	0	0
40	BEE2509	Power Electronics	3	0	0	3	3	0	3
41	BEE2510	Professional Elective-I	3	0	0	3	3	0	3
42	BEE2511	Control System-I	3	0	0	3	3	0	3
43	BEE2512	Electrical Power Transmission & Distribution	3	0	0	3	3	0	3
44	BEL2505	Open Elective-I	3	0	0	3	3	0	3
45	BHU2501	Professional Ethics, Professional Laws And Human Values	2	0	0	2	2	0	2
46	BEE2594	Control Systems Laboratory	0	0	0	0	0	1.5	1.5
47	BEE2597	Signals & Systems Laboratory	0	0	3	3	0	1.5	1.5
48	BEE2598	Power Electronics Laboratory	0	0	3	3	0	1.5	1.5
49	BEE2611	Switchgear And Protection	3	0	0	3	3	0	3
50	BEE2612	Micrroprocessor And Microcontroller	3	0	0	3	3	0	3
51	BEE2613	Professional Elective-II	3	0	0	3	3	0	3
52	BEE2614	Professional Elective-III	3	0	0	3	3	0	3
53	BCM2609	Open Elective-II	3	0	0	3	3	0	3
54	BHU2502	Financial Management, Cost Analysis & Ratio Analysis	2	0	0	2	2	0	2
55	BEE2697	Microprocessor & Microcontroller Laboratory	0	0	3	3	0	1.5	1.5
56	BEE2698	Power System Laboratory-I	0	0	3	3	0	1.5	1.5
57	BEE2699	Electrical Machine Design	0	0	0	0	0	1.5	1.5
58	BNC2601	Summer Industry Internship/Training/Project	0	0	0	0	0	0	0
59	BEE2702	Power System Operation & Control	3	0	0	3	3	0	3
60	BEE2714	High Voltage Engineering	3	0	0	3	3	0	3
61	BEE2713	Professional Elective-IV	3	0	0	3	3	0	3
62	BME2710	Open Elective-III	3	0	0	3	3	0	3
63	BEE2793	Power System Laboratory-II	0	0	3	3	0	1.5	1.5
64	BEE2794	Project-I	0	0	6	6	0	3	3
65	BEE2795	Seminar On Internship	0	0	3	3	0	1.5	1.5
66	BPE2808	Open Elective-IV	3	0	0	3	3	0	3
67	BEE2807	Professional Elective-V	3	0	0	3	3	0	3
68	BEE2806	Professional Elective-VI	3	0	0	3	3	0	3
69	BEE2894	Project-II	0	0	12	12	0	6	6
70	BEE2895	Seminar On Project	0	0	2	2	0	1	1

		Total	**115**	**4**	**86**	**205**	**116**	**49.0**	**165.0**

2.1.3 State the components of the curriculum (5)

In

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Course Components	Curriculum Content (% of total number of credits of the program)	Total number of contact hours	Total number of credits
Basic Sciences	12.5	28.00	25.00

2.1.4 State the process used to identify extent of compliance of the curriculum for attaining the Program Outcomes and Program Specific Outcomes as mentioned in Annexure I (10)

Inst

The following steps are used to identify extent of compliance of the curriculum:

Step 1: Each subject has five Course Outcomes (COs).

Step 2: The course outcomes are mapped to relevant Program Outcomes (POs) namely PO1 to PO12 along with three Program Specific Outcomes (PSOs). The mapping is done by team of faculty along with Head of the Department.

Step 3: After CO-PO and CO-PSO mapping, discussion with faculty members regarding the compliance of the curriculum is done through department meeting. The collected views are taken to Internal Quality Assurance Cell (IQAC).

Step 4: The IQAC conducts a curriculum workshop in every four years with the stake holders. The cell collects feedback, suggestions, and modifications from stakeholders and submits the same to the Departmental Syllabus Committee (DSC) to prepare/modify the curriculum.

Step 5: The DSC members analyse whether the curriculum meets the desired program outcome and program specific outcome. If necessary, it will suggest the introduction of new electives and one credit courses to meet specific program or program specific outcome.

Step 6: The views expressed by DSC will be expressed in the Board of Studies (BoS). The BoS members will analyse the recommendation so that the contents fulfil all the statutory requirements, else it is again returned for review.

Step 7: Redrafting the curriculum is made on the basis of valuable comments of BoS, the final draft is sent for Academic Council approval.

Step 8: Taking the comments from the members of Academic Council into consideration, final draft syllabus is put to the approval of Board of Management.

Step 9: The approved curriculum is circulated to various stakeholders for implementation.

2.2 Teaching-Learning Processes (70)

2.2.1 Describe Processes followed to improve quality of Teaching & Learning (15) Inst

1. A systematic and holistic procedure is adopted to improve the Teaching learning process through regular evaluation of outcomes, which indicate gradual improvement in students' performance.
2. Based on rate of gradual progress in learning outcomes of students, the teaching process is modified, aided, regularlyto enable improvement in learning outcome.
3. The Course allotment for each course takes place in the previous semester in a particular academic year, so that the concerned faculty members get sufficient time to plan their overall pedagogical approach in terms of developing course materials. They can plan about the teaching and visualization tools, use of relevant online course explanatory aids, software/hardware tools, think about real world problems related to the course etc.
4. Each Faculty Member maintains a course file to record the progress of Course throughout the semester.
5. In this regard, the Junior Faculty staffs take the help of seniors who had the experience of teaching the same or a similar course in the past. The lesson plans are prepared after consulting with senior faculty members and following the academic calendar prepared anddistributed by the University. The Academic Calendar is circulated by the office of Dean Academic of the University twice in a academic session (Once every Semester). The academic calendar schedule is strictly adhered by the department in order to plan all the departmental academic activities.

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA
ACADEMIC & ACTIVITY CALENDAR OF ODD SEMESTER OF Aug' 2022 to Dec'-2022
PART - A

Sl. No.	Details of Academic Events	3rd Semester B.Tech/B.Arch./M.Tech./ MCA/M.Sc./ Ph.D./ Integrated M.Sc.	5th & 7th Sem. B.Tech/ 5th, 7th & 9th Sem.B.Arch./ 5th, 7th & 9th Sem.Dual Degree/ 5th, 7th & 9th Integrated M.Sc.
1	(A) Registration of Regular students (without fine) to Odd Semesters. Registration of students shall be done in respective department.	08.8.2022 & 10.08.2022	01.08.2022 to 03.08.2022
	(B) Re-admission of eligible backlog students to Odd Semester (without fine). Re-admission of students shall be done in Academic Section.	08.8.2022 & 10.08.2022	01.08.2022 to 03.08.2022
2	Commencement of Odd Semester classes	08.08.2022	01.08.2022
3	(A) Registration of Regular students (with fine) to Odd Semesters. Registration of students shall be done in respective department.	26.08.2022 & 27.08.2022	19.08.2022 & 20.08.2022
	(B) Re-admission of eligible backlog students to Odd Semester (with fine). Re-admission of students shall be done in Academic Section.	26.08.2022 & 27.08.2022	26.08.2022 & 27.08.2022
4	Last date of the review meeting before Mid-semester Examination in the respective Departments and notification about attendance of the student by the concerned HOD (a copy of Departmental proceedings and notification to be sent to office of Dean, Academic Affairs.)	15.10.2022	15.10.2022
5	Mid-Semester Examination	17.10.2022 to 22.10.2022	17.10.2022 to 22.10.2022
6	Repeat Mid Semester Examinations starts from	09.11.2022	09.11.2022
7	Last date of showing evaluated Mid semester/Repeat Mid Semester answer scripts to the students by the concerned subject teacher	19.11.2022	19.11.2022
8	Last date of completion of sessional/Lab/Project & Viva Examination and Theory Classes	03.12.2022	03.12.2022
9	Last date of submission of consolidated attendance shortage report to the office Dean, Academic Affairs by HODs in proper format.	05.12.2022	05.12.2022
10	Last date of Report to COE by HODs after Departmental meeting on Lab/Sessional/Viva/Seminar/Project etc. failure cases.	05.12.2022	05.12.2022
11	Date of Notification of debarring students from appearing End Semester Examination for Attendance Shortage by the office of Dean, Academic Affairs	09.12.2022	09.12.2022
12	End Semester Examination (Theory Papers)	12.12.2022 to 24.12.2022	12.12.2022 to 24.12.2022
13	Last Date of evaluation of End Semester Answer Book	10.01.2023	10.01.2023
14	Last Date of showing evaluated End Semester Answer Book to students	10.01.2023	10.01.2023
15	Last date of Submission of Answer Book (Mid-Semester & End Semester) in the office of COE and on line submission of marks.	10.01.2023	10.01.2023
16	Last date of Publication of Odd Semester results	28.01.2023	28.01.2023

PART – B

Sl. No.	Details of Academic Events	All Even Semesters of B.Tech/B.Arch./MCA/M.Sc/M.Tech/ Dual Degree/Integrated M.Sc. & Ph.D
1	Date of Subject Registration for Even Semesters 2023	02.01.2023 & 04.01.2023
2	Date of commencement of Even Semesters classes 2023	02.01.2023

N.B: For theory classes, if the no. of working days available is less than 90 days, extra classes are to be taken by concerned subject teachers to compensate the study period of 90 days.

Dean, Academic Affairs
Memo No.VSSUT/ACD/ 665 /2022 Dated: 01/07/2022
Copy to :
1. University Notice Board /All Deans/ All HODs/Registrar/Wardens of All Halls of Residence/ COE/COF/All PICs for information & necessary action.
2. Dean, F&P for information with a request to facilitate in uploading this notice in the University Website for wide circulation.
3. P.A. to V.C for kind information of Hon'ble Vice Chancellor.

Dean, Academic Affairs

6. For each course, the detailed lesson wise courseplan is prepared which describes the details of the topics to be covered in eachlecture hour, portions to be covered before Mid Semester Examinations, number of tutorials to be conducted and, thenumber of hours needed for completing each topic. Sample Course delivery Plan and Lesson Plan.
7. Each Faculty member prepares Lecture Notes, Power Point Presentation and other teaching aids clearly defining the concepts of the portions of topics covered. It also aims to develop the problem solving abilities of the students. Lecture notes contents also focus on the technology adopted in the field of real world industry, power sector, the best practices of standards and protocols followed by industry, relating them to the syllabus contents. Case studies, and real world problems are also encouraged to be researched and discussed. However, the main objective for design of such lecture notes is more concerned to develop each student's ability to perform well in both end semester examination as well as any nationallevel competitive examination like GATE etc.
8. Information and Communication Technology(ICT), has become a powerful medium of communication in recent times. The University has taken care of the same by furnishing all classrooms with smart boards as a first step. The department faculty members use several software tools like MATLAB, PSCAD, Dig-Silent, OPAL-RT, LABVIEW, HOMER, etc., as pedagogical aid to achieve better outcomes.
9. The faculty members provide sufficient video lecture contents of eminent faculty members from around the nation by sharing video lectures and study materials of NPTEL and of reputed university around the world. The faculty members themselves usually enrol in these courses to gain proficiency, knowledge and additional certification to improve their teaching continuously.

List of Teachers Course Participation/Certification.

Sl. No	Name of Faculty Member	Title of Online Course	Course offered by	Remark on Completion/Certification
1	Dr.B.B.Pati	Digital Transformation in Teaching Learning Process Curriculum, Pedagogy and Evaluation for Higher Education	NPTEL, AICTE	
2	Dr Manish Tripathy	Digital Transformation in Teaching Learning Process	NPTEL, AICTE	
3	Dr Banaja Mohanty	Curriculum, Pedagogy and Evaluation for Higher Education	NPTEL, AICTE	

4	Dr. Bidyadhar Rout	Fundamental Concepts of Electricity Digital Transformation in Teaching Learning Process	NPTEL, AICTE	
5	Dr. Rajat Kanti Samal	Artificial Intelligence: Search Methods for Problem Solving Deep Learning Introduction to Machine Learning Innovation, Business Models and Entrepreneurship. Managing Intellectual Property in Universities. Patent Law for Engineers and Scientists. Programming, Data Structures and Algorithms using Python. Patent Drafting for Beginners. Patent Search for Engineers and Lawyers. Design of Photovoltaic Systems. Curriculum, Pedagogy and Evaluation For Higher Education. Roadmap for patent creation.	NPTEL, AICTE	
6	Dr.. Debidasi Mohanty	Digital Transformation in Teaching Learning Process DC Microgrid and Control System. Non-Conventional Energy Resources. Smartgrid-Basics to Advanced Technologies	NPTEL, AICTE	
7	Dr. Rosy Pradhan	Digital Transformation in Teaching Learning Process.	NPTEL, AICTE	
8	Dr. Bineeta Soreng	Power System Protection and Switchgear	NPTEL, AICTE	
9	Dr. Prangya Mohanty	Smart Grid:Basics to Advanced Technologies	NPTEL, AICTE	
10	Mr. Pratyusha Pratik	Digital transformation in teaching learning process	NPTEL, AICTE	
11	Dr. Sagarika Rout	Electrical Distribution System Analysis	NPTEL, AICTE	
12	Mr. K Sujita Kumar Achary	Digital Transformation in Teaching Learning Process	NPTEL, AICTE	
13	Ms. Bisaya Bhoi	Management of Intellectual Property Uncertainty in Designing and manufacturing for Electric Vehicle Systems	NPTEL, AICTE	

10. The Internal Quality Assurance Cell (IQAC) of the university takes periodic internal academic audit of the teaching-learning activities of the department/faculties to ensure improvement in teaching learning process every three years.

11. A detailed formative assessment plan is formulated for continuous evaluation of the students over the semester. It carries 50% weightage in total marks, divided into three categories

i. Classroom performance evaluation through periodic tests and quizzes, home assignments, Viva (10 marks)
ii. Attendance and participation in classroom discussion (10 Marks)
iii. Mid Semester Examination (30 Marks)

12. Depending upon requirements of a particular course, faculty members usually adopt many interactive methods like, group discussion, seminar based approaches, besides usual classroom teaching. In some courses, short introductory 6-7 hours study tours to a nearby industry installation (AdityaAlumina, Hindalco, NTPC, OHPC Power House, Grid substation) situated in the vicinity of University. In order to develop interest and zeal among students, faculties in some courses assign the students with seminars based on topics related to technological advancements and industry practices which are more contemporary in the practical field, so that students get motivated to know more and may create interest to try and be innovative in practical problem solution and develop their entrepreneurial spirit in future.

List of Study Tours arranged

Sl No.	Name of Industry/Organization Visited	Target group of Students	Date of Visit	Duration	Remarks
1	Hirakud Hydro Electric Project	72	23.03.2023	1 day	
2	Hirakud Hydro Electric Project	69	24.03.2023	1 DAY	

13. Develop a habit of self learning for lifelong among students:

To develop a habit of self-lifelong learning among the students, they are encouraged with the following practices.

a. Visit Library to refer to latest as well as old classical books, reference materials, journal, video lectures and prepare assignments summarizing their learning.

b. They are encouraged to participate in technical festivals, hackathon being conducted throughout in reputed Institutes and Industries in the nation. The University organizes technical festival SAMAVESH every year under the mentorship of a Prof-in-Charge and technical committee. The department students' participation is encouraged. Moreover, the department also conducts Departmental Technical Festival RESONANCE, where various competitions related to Model presentation, Technical Seminar, Quizzing, GD etc. are organized and evaluated by committee of faculty members.

c. Through invited guest lectures by Industry personnel and Faculty members of reputed Institutes like IITs, IIMs, NITs etc, the students are exposed to latest technological advancements in their topics of interest.

List of Invited Lectures

SL. No.	Resource Person	Date and time	Topic	Target group of Audience
1	Prof. Chetan Singh Solanki	10.06.2022, 3.00-5.00 PM	Energy Climate change and I	Faculties and Students
2	Dr. Sukumar Mishra, Professor, IIT, Delhi	03.02.2023, 4.00-6.00 PM	Renewable Integrated EV Charger and its Cyber Security Threat	Faculties and Students
3	Resource person from OPAL-RT	05-10-2023-06-10-2023	Demonstration Programme of Real Time Digital Simulator (OPAL-RT)	Faculties and Students

14. For assisting the weak students a committee of faculty members i.e., SMCC (Student Mentoring and Counselling Committee) is formed for monitoring them academically. Students are grouped and mentored by individual teachers from the department. For mentoring the weak students extra classes and remedial classes are conducted. Further, the bright students are given the responsibility of mentoring the weaker students, as they belong to the same peer group. Their behavioural and psychological issues are also addressed through counselling.

15. Instruction Methodology in the Laboratory Sessional Course*:* The main objective of developing overall pedagogical approach and instruction for specific practical based sessional, is focused on inculcating the following attributes and skills among the students.

i. To be able to develop confidence, in performing the experiment all by himself/herself.

ii. To be able to relate with the original theoretical concepts, and be able to critically analyse to understand whether the experiments are same or different from theory.

iii. Not only to develop leadership skills in performing a task, but also be able to work in team to achieve the same.

For achieving the above mentioned objective, the following approach is adopted to plan and conduct a particular Laboratory course.

i. Since the load distribution among faculty members for a particular semester are completed well in advance, the faculty members get ample time, to prepare the list of experiments to be conducted taking into account CO-PO PSO mapping.

ii. Laboratory manuals are prepared clearly to elucidate, fundamental theory and concept behind the Lab experiment. These manuals describe the theoretical background, related circuit and specifications, procedure, tabulation etc., at the end each experiment. Further, there are ample numbers of questionnaire to examine each student's understanding and critical thinking ability.

iii. The students are provided with requisition slips, which mentions Aim of the Experiment, Machine Specification, Measuring equipment and other meters, CROs, Sensors, transducers etc to be filled and verified by the assigned faculty members before conducting the experiments.

iv. The students are divided into as many numbers of groups as there are experiments and assigned with experiments which they conduct rotation wise over the weeks. The students are required to come prepared to the Laboratory with all relevant theory and concepts related to the experiments and each student is being asked with relevant questions to verify and grade their preparedness. Weaker students are explained with the details of the experiment.

v. After satisfactory discussion with students, they start the experiments after issuing the equipment and meters and connecting the circuit. While performing the experiments, each student's involvement in conduct of experiment is also assessed by the assigned faculty member. At the completion of the experiment, each student is required to note down readings and plot graph, trace from CROs and perform a short discussion among themselves to explain and discuss about the correctness of the results and data with the faculty member. They are required to submit, the complete documentation of experiment along with conclusions and review questions within 48 hours of the conduct of experiment.

vi. All the students maintain a rough record, to perform experiments, and get their findings verified from the faculty members.

vii. It has been observed that this method of instruction made students prepare and understand the correlation of the experiments with the related theory and also made them to be confident on conducting the experiment on their own.

16. Student's Feedback of Teaching Learning Process :

i. For every course, student's feedback is obtained from all the enrolled students. The students are asked with varieties of questions related to their satisfaction in terms of various factors. The students are asked to give their score in the range of 1-5 for each of the questions.

Sample Student's Feedback Form

Academic Year						
Semester						
Section						
Name of the Course						
Name of the Faculty Member						
Rate the Faculty Member In terms of score(1-5)	Very Poor(1)	Poor(2)	Good(3)	Very Good(4)	Excellent(5)	Rating

1.Has the Faculty Member Covered Entire Syllabus as Prescribed by University	
2.Has the Faculty Member covered relevant topics beyond Syllabus	
3.Effectiveness of Faculty Member in terms of the following	
a.Technical Course Content	
b. Communication Skills	
c.Use of Teaching Aids	
4.Pace on which contents were covered	
5.Motivation and Inspiration to learn	
6.Support for development of Student's skills	
a.Practical Demonstration	
b.Hands on Training	
7.Clarity of Expectation of Students	
8.Feedback Provided on students' progress	
9.Willingness to offer help and advice to students	
10.Opinion on review and design of syllabus	

17. Impact Analysis

(a) The quality of teaching is exhibited in terms of attaining POs, PEOs to the extent of 70-80 %.

(b) In terms of the academic outcome, more than 85% of students are completing their course with in the stipulated time of four years.

c) Because of the extra support of slow learning weaker students, the pass percentage is gradually improving and the number of backlogs of students is decreasing.

2.2.2 Quality of end semester examination, internal semester question papers, assignments and evaluation (15) Inst

The courses are categorized into theory and sessional. To evaluate the students performance, the evaluation methodologies are as follows,

1. **Methodology of Question paper Preparation and evaluation for theory courses**

The department follows the rubrics as in Table No. 1 as designed by the University for question paper preparation and evaluation.

Table No. 1: Rubrics followed for evaluation of students' outcome in a course

Marks for Class Attendance, Assignments and Quiz	Marks for Mid-semester exam	Marks for End-semester exam	Total
20	30	50	100

i. ***Preparation and evaluation of Assignments***: Continuous evaluation of students' performance is done by taking quizzes and home assignments throughout the marks. The faculty members are advised to design their assignments and quizzes not only to succeed in End Semester Examination, but also to verify the abilities core knowledge of the students.The assignments are evaluated and the marks are intimated to the students before the End Semester Examinations.

- Process to ensure the quality of the assignments:
  - At least two assignments are given before and after the mid-semester examination.
  - The assignments are in alignment with the syllabus covered and COs of the course.
  - The assignments include both theoretical and numerical concepts of the course.
  - The assignment marks secured by the students are intimated to them before the end semester examinations and final submission to the controller of examinations.

ii. ***Question Paper Preparation for Mid-semester examination*:** The Mid Semester examination is conducted at the middle of each semester, as per the scheduled d weightage of 30 marks. The course coordinator of a subject is decided by the Board of studies every semester. The Questions are aligned with the syllabus and their aim to evaluate the understanding of a portion of the syllabus that is completed till that point. For common subjects a single set question is prepared for uniform eval course coordinator.

iii. ***Question Paper Preparation for End-semester examination*:** End-semester examination is conducted at the end of each semester to evaluate the students whole subject covering the whole syllabus. It has a weightage of 50 marks. The following method is adopted for question paper preparation.

- By the scheduled date of End Semester examinations, the Board of Studies(BOS) of the department, has already finalized and ratified the names of question setters (external examiner) from reputed Institutes across the nation for each course and the names of internal examiners.
- The Controller of Examinations(COE), selects a particular expert's name out of the list to request for question papers as per the syllabus. In case of non-availability of question setter due to some reason, the internal examiner/ senior faculty member sets the question paper keeping an eye on the COs of the particular course.
- The previous years questions are also taken into consideration to avoid repetition and maintain their standard and quality.
- The faculty members/internal examiners are advised to prepare questions following Bloom's taxonomy. Approximately, one third of the questions are based on fundamentals of a course, which can be answered by an average student. Another one third of the questions aims to test the deeper understanding of the core knowledge, which may demand analytical, conceptual and information based competency of the student. The final third category examines theproblem solvingability of the student, which requires clarity and critical thinkingby the student.

iv. *Procedure followed for Answer Script evaluation of both Mid-Semester and End Semester Examinations:*

- The evaluation process of theory subjects is followed as per the guidelines laid by The Dean, Academics of the university.
- The scheme of evaluation for the question papers are prepared by the respective faculty members/internal examiners in advance. The CO coverage and the marks allotted for each of the COs are recorded by the faculty members for preparing mapping on CO-PO-PSO at the end.
- It is the statutory procedure of the university to show the evaluated answer scripts to the students. Once the students have seen the answer scripts and satisfied by signing, the marks are forwarded to the examination section for final declaration of results.

2. **Methodologyfor conducting sessional/practical laboratory Course evaluation:**

- There is a faculty in-charge for each laboratory, apart from the assigned faculty member for a course. The list of experiments in each sessional course is finalized and updated periodically on the basis of CO, PO and PSO requirement by the Board of studies.
- ***Continuous evaluation*** of students' performance and understanding of the experiments of a sessional course is done for each experiment during laboratory class. It has a weightage of 20 marks. Based on preparedness of students before conducting of experiment, a minor viva is conducted to all the students of the group. Even though they are finally explained clearly before conduct of experiment, their preparedness for the experiment is graded, along with each student's involvement in the conduct of the same.
- ***End semester evaluation*** for the lab courses is conducted after completing all the experiments in each semester, for the remaining 80 marks. The marks and subsequently grades are awarded based on students' performance on laboratory tests, record writing, viva and/or quizzes. The evaluation process for each of the components is followed systematically.

i. For Laboratory test each student is asked to answer a specific question related to any of the experiments they had completed during classes. Questions are designe requires either some portions or a complete experiment to be conducted. Care is taken so that the student shall be able to complete the required experiment within s awarded out of 30.

ii. The students write record throughout the semester while conducting experiments in classes. Faculty members have evaluated their records over the semester base level of addressing to faculty member's comments, clarity in writing and concluding, etc. These continuous evaluations are in the form of grades, which are directly s evaluation.

iii. Each student has to face viva-voce examination and quiz test, where, the faculty members examine the student's competency in both fundamental theoretical aspec conducting each experiment. They are given marks as per their performance out of 20.

iv. Attendance component of 10 marks intends to examine both the regularity and punctuality of students in performing the experiments.

Table.No. 2: The Evaluation Process of Laboratory based Courses

Continuous Assessment	End-Semester Assessment	
20	80	Laboratory test :30
		Record Writing:20
		Viva/Quiz:20
		Attendance:10

3. **Methodology for conducting Seminar Course evaluation:**

Assessment is based upon the methodology being followed and its effectiveness. A group of teachers along with Seminar coordinator evaluate the performance of students based on their presentation and viva-voce examination as per below format.

Table No. 8: Seminar Evaluation Scheme Format

Seminar Report (20)	PPT Preparation and Presentation (40)	Viva and Presentation (40)	Total (100)	Grade

2.2.3 Quality of student projects (20)

Inst

The theoretical knowledge as well as practical skill of the students can be discovered through student projects. A great emphasis is given to student projects. As per the curriculum, the final (4th) year students are required to carry out two numbers of projects, i.e., Minor Project(Project-I) during 7th Semester and a Major Project(Project-II) during 8th Semester.

i. *Assignment of Project Work*

- The grouping of the students, in groups of 6/7 begins by the end of sixth semester, under the guidance of each faculty member (Project Guide). The students are assigned with the same project guide, both for Minor and Major Projects, unless there are specific requirements to change the project guide.
- The groups are encouraged to discuss with project guide after referring to literature and previously completed project reports from the department. They are asked topropose a suitable project of their interest and give ample justification in terms of its deliverables. This will be presented in front of a project review committee in the department deputed by the Chairperson. Based on this the project will be finalized. Types and relevance of the projects and their contribution towards the attainment of POs and PSOs are also assessed.

Table No.1: Criteria for finalizing Project Title

Project Title	Student Name	Project Guide	Relevant PO and PSO Addressed	Environment	Safety	Ethics (Plagiarism)	Cost
				Y/N	Y/N	Y/N	Y/N

- Once the project topic is finalised, the students discuss among themselves the theoretical and practical aspects of the proposed project work. Each group is asked to write a report on the statement of purpose of the project work, time frame of the implementation, expected outcome of the project work along with the reference material.

ii. *Process for monitoring and evaluation:*

- In order to assess the students' progress in their project work, students are instructed to maintain a project diary to record the progress of their activities in relation to the project. Throughout the semester, the project guide monitors the progress of the work and grades individual student's involvement, understanding and contribution.
- A project evaluation committee is formed including the HOD and senior faculties for 7th semester project evaluation. For 8th semester Major project, the interim evaluation is conducted by the same internal project evaluation committee members. However, for final evaluation, an external faculty from a reputed university/institute is requested to be an invited members of evaluation committee for assessing the final attainment. During their final presentation for evaluation, each student group is required to prepare and submit their project report, according to the standard template of the Department/University. The report should elucidate all aspects of the work, highlighting the motivation to select the work, the objective, the methodology employed, limitations, future work etc for the topic.
- The reports should be attached with plagiarism report from a standard software like *Itheticate*, and the report should satisfy the minimum similarity index requirement, for it to be accepted for submission.
- The final evaluation for 7th Semester minor project(Project-I) and 8th Semester Major project(Project-II), the following approach of evaluation and assessment is followed.
- In order to quantify and assess the level of relevance of the project, progress made by the project group of students during the interim evaluation and final contribution the group can achieve towards attainment of POs and PSOs , the project evaluation committee and other faculty members are advised to adopt the following approach of evaluating.

Table No.2:Process of Interim and Final Evaluation of Students' Projects

COs To be Evaluated	CO1	CO2	CO3	CO4	CO5	Total
POs To be Evaluated	PO2-PO5	PO6-PO7,PO11	PO1-PO5, PO9-PO11	PO1-PO4	PO8, PO10	
Attributes Evaluated	Knowledge and skills in Tools and Techniques	New Dimension Society, Ethics, Environment	Application/Implementation/ Group Activity/ Communication and Management skills	Analyze and Find Solution	Ability of presenting and concluding	
Interim Evaluation						
Final Evaluation						

All the committee members, project guides and HOD, finally scale up the above table based score in terms of appropriate marks to be awarded as per the following tables.

Table No.3: Evaluation Marks Rubrics for 7th Semester project(Project-I)

Faculty	Marks	Area examined
Senior Faculty	30	Examines the scope and objectives of the work along with quality of results obtained and the approach used for it.
HOD	20	Examines the level of overall understanding, the layout of the report and the writing style.
Project Guide	50	Examines originality in the analysis (theoretical and/or empirical) and the future scope.

Table No.4: Evaluation Marks Rubrics for 8th Semester project(Project-II)

Faculty	Marks	Area examined

External Examiner	30	Examines the scope and objectives of the work along with quality of results obtained and the approach used for it.
HOD	20	Examines the level of overall understanding, the layout of the report. the writing style, plagiarism report etc.
Project Guide	50	Examines originality in the analysis (theoretical and/or empirical) and the future scope.

Table No.5: List of 8th Semester Major Projects(Project-II) Completed

Sl. No.	Students Roll No.	Guide Name	Project Title	A.Y.
Year 2022-23				
01	1902050074, 1902050087, 1902050098, 1902050129, 1902050114, 1902050126, 1904050004, 1904050017	Dr. Manish Tripathy	Performance Comparison between Classical and Fuzzy PID Controller For Speed control of DC motor.	2022-2023
02	1902050127, 1902050088, 1902050099, 1902050075	Dr. Papia Ray	Renewable Energy Based OFF-Grid Electric Vehicle Charging Station.	2022-2023
03	1902050022, 1902050036, 190203048, 1902050062	Dr. Ramesh Ch. Prusty	Neural Network Based Control Approach for Power Quality Improvement of Solar PV interfaced Distribution System.	2022-2023
04	1902050086, 1902050108, 1904050016, 1902050113, 1902050073, 1902050097	Dr. P.K. Hota	Speed control of BLDC motor using PID Controller.	2022-2023
05	1902050003, 1902050017, 1904050032, 1902050057, 1902050070, 2003050005	Dr. S. Panda	Frequency Regulation Strategy in Micro-grids including Renewable Energy and Electric Vehicle.	2022-2023
Year 2021-22				
01	1802050075, 1802050090, 1802050107, 1802050115, 1802110024, 1804050009	Dr. Manish Tripathy	A Single stage Buck-Boost Transformer-less Inverter topology for Single phase Grid connected Solar PV-System.	2021-2022
02	1802050098, 1802050081, 1903050008, 1804050016, 1802050120, 1702050007	Ms. Debidasi Mohanty	Design of ANN based MPPT Controller for the Solar power water pumping system.	2021-2022
03	1802050007, 1802050024, 1903050042, 1802030055, 1802050054, 1802050068	Dr. R. C. Prusty	Simulation and performance analysis of Solar-PV-Wind-Hybrid Energy System using Simulink.	2021-2022
04	1802111047, 1802050078, 1802050093, 1802050117, 1804050011	Mr. B.D. Rout	Hybrid Configuration of wind-PV System and Energy maximization.	2021-2022
05	1802031107, 1802050009, 1802050026, 1802050069, 1802050055, 1802050043	Dr. R.K. Samal	Modelling and Simulation of Power Electronics converters using KiCAD and ngSPICE.	2021-2022
Year 2020-21				

01	1702050054, 1702050034, 1702050001, 1702050018, 1702050069, 1803050009	Dr. Papia Ray	Short term load forecasting using computational intelligent techniques	2020-2021
02	1702050004, 1702050022, 1702100041	Dr. Raseswari Pradhan	Reinforcement Technique used in Brushless DC motor speed control	2020-2021
03				

Improve Quality of completed projects

- In order to motivate students to perform and complete good quality projects, the University has a scheme to award best project of the University and from each department. For the same, a Project selection committee is formed with HOS, HOD as representatives of each department and senior faculty members of different departments.

Table No: 6 8th Semester Best Major Projects (Project-II) of Electrical Engineering

Sl. No.	Title of project	Name of students	Project guide	Academic year
1	Development of a Power Quality Analyzer with Arduino Technology and Machine Learning based PQ event Classification	Suparna Biswal	Dr Papia Ray	2021-22

- To promote good quality work, the group of students, with the help of their project guide, are encouraged to publish their work in relevant journals or conferences, if there is a scope for the same.

Table No.7: Journal/Conference Paper published from Project-II

Sl. No.	Title of paper	Co-author(s), if any	Name of the Conference
1	Seamless Operation of Microgrid using PI controller based on Artificial Neural Network	Priyanshu Mondal, Nikhilesh Mahanta	3rd International Symposium on Sustainable Energy and Technological Advancements (ISSETA 2024)
2	Renewable Energy Based Off-Grid Electric Vehicle Charging Station	Satyaswarup Nayak, ,	2023 IEEE 3rd International Conference on Sustainable Energy and Future Electric Transportation (SEFET)
3	Intelligent Overcurrent and Distance Relay Coordination in Power Networks	Abhilash Asit Kumar Majhi	2023 IEEE 3rd International Conference on Sustainable Energy and Future Electric Transportation (SEFET)
4	A Novel Approach Towards Performance Analysis of Three Phase Two Level Inverter	Shreya Mohanty,	4th Electric Power and Renewable Energy Conference (EPREC-2023)
7	Cost and Feasibility Analysis of a Solar-Powered Water Pumping System	Sonalika Nayak, Barsha Rani Pradhan	2023 International Conference on Recent Advances in Electrical, Electronics & Digital Healthcare Technologies (REEDCON)
8	Offline power quality management and control using neural networks	R. Aditya Kumar	International Conference on Renewable Power, Springer
9	Techno-Economic Analysis on Solar and Wind Assisted Standalone Microgrid	Abhilash Asit Kumar Majhi	2022 OITS IEEE International Conference on Information Technology (OCIT)
10	Development of a Smart wind Monitoring System using Arduino Technology	K. R. Satyajit, Abhilash Asit Kumar Majhi, and Chinmay Singh	3rd Electric Power and Renewable Energy Conference(EPREC-2022)
11	Development of a Power Quality Analyzer using Arduino Technology	Nirlipta Parida, Suparna Biswal	3rd Electric Power and Renewable Energy Conference (EPREC-2022)
14	A Computational Intelligence based Novel Bearing Defect Detection Method	K. R. Satyajit	2nd Electric Power and Renewable Energy Conference (EPREC-2021)

15	Convolutional Neural Network based Lung Cancer Detection	K. R. Satyajit, Sai Samarpita	1st International Conference on Smart Energy and Advancement in Power Technologies (ICSEAPT-2021)
16	Real-Time Power Quality Monitoring System in LabVIEW using Wavelet Transform and STOCKWELL Stockwell Transform	K. R. Satyajit	1st International Conference on Smart Energy and Advancement in Power Technologies (ICSEAPT-2021)
17	An Intelligent Approach for Defect Detection of Bearing	K. R. Satyajit	1st International Conference on Smart Energy and Advancement in Power Technologies (ICSEAPT-2021)

2.2.4 Initiatives related to industry interaction (10)

Inst

The university emphasizes on institute-industry interactions which keeps all the stakeholders' (faculty & students) to remain abreast with the latest developments in the industry.Further, a continuous institute-industry interaction leads to joint research from academia partnering with industry in the longer run and it results in considerable improvement in learning outcome of students.
Apart from overall development in curriculum by introducing new industry oriented courses, it helps in value addition for students, as there is exposure to various opportunities to stay updated about latest trends and technologies. The faculties can utilize industrial testing facilities and help industries to solve their problems through research, training and consultancy.

- *Signing of MOUs with Industry/ Research Centres*: The University has signed MOU with the following Industries, R&D Lab, PSUs and Reputed Educational Institutions,

IITs, IIMs, NITs, IIIT, BPUT, IGIT Sarang, NISER, IISER, MCL, PGCIL, OHPC, OPGC, NALCO, HINDALCO, OPTCL, Tata Power, CIPET Balasore, ISRO, Bengaluru, DELNET, Tech Mahindra Ltd. Etc.
In order to fulfil the above objectives, the Department of Electrical Engineering, has signed MOU with the following industries,

Table No.16: List of MOUs

Sl. No.	Industry/ Research Centre/Institute With which MOU signed	Date of Signing MOU	Remarks
1	Tata Power Western Odisha Development Ltd. (TPWODL)	02.06.2022	For renewable energy and e-vehicle

- *Faculty-Student-Industry Interaction*: In order to initiate a working relation with resource persons of Industry/Research Centres etc, to keep possibility of developing a communicating bond, for any possible future MOUs, Guest lectures by various industry Experts are arranged from time to time.

In this regard, few experts have delivered guest lectures, as organized by the department during the concerned assessment years.

Table No.17: List of Expert Talk by Industry/ Research Centre Person

SL. No.	**Resource Person**	**Date and time**	**Topic**
1	Prof. Chetan Singh Solanki	10.06.2022, 3.00-5.00 PM	Energy Climate change and I
2	Dr. Sukumar Mishra, Professor, IIT, Delhi	03.02.2023, 4.00-6.00 PM	Renewable Integrated EV Charger and its Cyber Security Threat
3	Resource person from OPAL-RT	05-10-2023-06-10-2023	Demonstration Programme of Real Time Digital Simulator (OPAL-RT)
4	Dr. Manohar Singh, CPRI Banglore		

- *Industry tour for field experience for different courses*:

To strengthen interaction with industries and to keep our students updated with the state-of-the-art trends in Electrical Engineering, the department undertakes technical visits to industries around and power stations / grids to get familiarized with the practicalities of various course contents. (Couse Name/No.: EPGS(), PSP(), SGP()) (Refer Table No.3)

- *Workshops arranged*:

Besides expert talks, the department has organized some short term training workshops given by firms of some commercially available software/hardware/HIL based products for their effective usage for pedagogy and research.

+ Table No. 18: List of Workshop Organized

Sl.No.	Software/Hardware/ HIL Product Name	Organized During	Objective/Expected Outcome	Academic Session
1	*Latex*	08-04-2022-09-04-2022	Research work documentation/Paper and report writing	2021-22
2	*Opal RT*	05-10-2023-06-10-2023	To help in verifying Simulation in HIL environment.	2023-24
3	*MATLAB/SIMULINK*	08-08-2022-19-08-2022	To help in Simulation	2022-23
4	IEEE awareness programme	24.02.2024	To aware the students and faculties about the IEEE Technical society	2020-21

- *Faculty members' interaction with an Industry for problem solution through consultancy:*

The department has initiated discussions with some industry for a possible consultancy work that is required by them for solving some practical problems they have encountered in the field. In this regard, the department has organized meetings with some Industry representatives. The meetings have resulted in positive response, where suggestions were to include pool of interested students for contributing to the industry needs, which may lead to opening of research centres by the Industry inside the campus in future.

Impact analysis:

- The effectiveness of these practices is gauged by the great response of the participants of the events.
- The students picked up what they learned at the events to implement in their own final year projects.
- The students gained an entrepreneurial spirit and project-based thinking from such exposure.
- The students are provided with feedback forms to rate their industrial training/internship. It is done to identify the level of achievement.
- The students present their 7th semester seminars on the industrial visits.

2.2.5 Initiatives related to industry internship/summer training (10) Inst

The university has a training and placement department. The T&P department collaborates with industry to arrange summer internships for students of 2nd and 3rd year which are integral part of the curriculum. Further, after the students are placed, some companies require the students to undergo internship program for varying duration. For such students, the T&P department makes arrangement of classes, mid term and end term examinations.

Year 2022-23

Sl No.	Name of the students	Roll Number	Name of the Company
01	Swaraj Pradhan	2002050082	CTTC Bhubaneswar
02	Ashish Samal	2002050083	OHPC(Hirakud Hydro Electric Project),BURLA
03	Flevie Pattanaik	2002050086	CTTC, BHUBANESWAR
04	Dilu Nahak	2002050087	OHPC (HHEP),Burla
05	Debasis padhi	2002050091	SAIL ROURKELA
06	Soumya Ranjan Mishra	2002050092	CISCO(courses)
07	Hemalata Seth	2002050093	Central Tool Room and Training Centre(CTTC), BBSR
08	Priyanshu Mondal	2002050097	NTPC Sipat , Bilaspur
09	Bhuleswar ekka	2002050099	SAIL ROURKELA
10	Roxy Ranjan Mallick	2002050101	CTTC
11	Minati Tanty	2002050104	OPTCL, Chandaka
12	Jayesh toppo	2002050105	OHPC, BURLA
13	Priyanka Bag	2002050107	CTTC
14	Rohit Manohar Sahoo	2002050110	OPTCL, BHUBANESHWAR, ODISHA
15	Anick Dungdung	2002050111	Central tool room and training centre (CTTC)
16	Rohit Kumar Tirkey	2002050112	SAIL,Rourkela
17	Keshari Kalo	2002050112	Central Tool Room And Training Centre(CTTC) , Bhubaneswar
18	Durllabhi Saralia	2002050117	Central tool room and training centre,Bhubaneswar
19	Arpita Lakra	2002050119	Central Tool Room and training center (CTTC),Bhubaneswar.
20	Tej Narayan Mishra	2002050120	NALCO angul
21	Somanath Behera	2002050122	SAIL, Rourkela
22	Harish Chandra Sahu	2103050011	OHPC,Burla
23	Sneha Ranjan Panda	2002050128	NALCO
24	Anshit Pradhan	2002050129	SAIL, Rourkela
25	Roshan Kumar Chouhan	2002050130	SAIL, Rourkela
26	Pratikhya tripathy	2002050132	National Thermal Power Corporation Limited.(NTPC), Talcher
27	Soumya Priya	2002050134	Electric loco shed, Angul, Indian Railways
28	Susmita Dash	2002050134	TPWODL, SEED division
29	Satyajit Sethi	2002050136	NSPCL, Rourkela
30	ANSUMAN MISHRA	2002050138	NALCO, ANGUL
31	SANJIB KUMAR NAIK	2002050140	NALCO,Angul
32	Satyabrata Dwivedy	2004050002	CTTC Bhubaneswar
33	Ekankika Parida	2004050014	TPWODL,SEED DIVISION,sambalpur
34	Praveen Kishan	2004050017	HINDALCO Industries Ltd, Hirakud FRP
35	PRIYANSHU KUMAR DORA	2004050020	CENTRAL TOOL ROOM AND TRAINING CENTRE (CTTC)
36	Smriti Panda	2004050024	Internshala and NIIT FOUNDATION
37	Megha Barik	2102050001	RSP, SAIL
38	Saisatyam Shasany	2102050002	OHPC,Burla
39	Madhusudan Mishra	2102050003	OHPC, Burla
40	Sumit Panigrahi	2102050004	NALCO, Damanjodi
41	Avilash Patel	2102050005	HINDALCO, Hirakud
42	Aditya mangaraj	2102050006	RSP, SAIL
43	Debiprasad Sahoo	2102050011	RSP , SAIL
44	Pradosh Kumar Pradhan	2102050012	NALCO,Angul
45	Kuldeep Jena	2102050013	HAL, KORAPUT
46	Aditi Jalan	2102050014	HINDALCO , Hirakud
47	Surya Narayan Das	2102050015	NALCO,ANGUL
48	Baibhaba Kumar Panda	2102050016	RSP, SAIL

49	Pritish Acharya	2102050018	RSP, SAIL
50	Pramit Routray	2102050019	IDCO, BHUBANESWAR
51	Shaikh Golam Tabrez	2102050021	RSP, SAIL
52	Rahul Krishna Nanda	2102050024	IG Drones
53	Aditya Singh Rai	2102050026	NALCO, Angul
54	Sushree Suchismita Mohanty	2102050027	RSP,SAIL
55	Samrit Krushan	2102050029	RSP, SAIL
56	Devi Prasad Pani	2102050030	IDCO, bhubaneswar
57	Amlan Acharya	2102050031	HAL Koraput
58	Rakesh Kumar Sahoo	2102050032	TATA STEEL,KALINGANAGAR
59	Tamanna Nandi	2102050033	OPTCL, Bhubaneswar
60	Debadeepta Sahoo	2102050036	NALCO,ANGUL
61	Swasti Prakash Bhanja	2102050037	NALCO,ANGUL
62	Subhransu Danta	2102050038	NALCO,ANGUL
63	SWATIPRAJNA SAHOO	2102050040	RSP, SAIL
64	Rohan Kumar Sahu	2102050041	OPTCL, Bhubaneswar
65	Smruti Neha Raul	2102050042	NTPC, Darlipali
66	Girija Bhusan Rath	2102050043	NALCO,ANGUL
67	Ritesh Patra	2102050044	RSP, ROURKELA
68	Rudra Narayan Subudhi	2102050046	NALCO, Anugul
69	Rajiv Mishra	2102050048	NALCO, Anugul
70	Swagat Shekhar Panda	2102050049	RSP, SAIL
71	SULAGNA PADHI	2102050050	NALCO, Damnjodi
72	Sri Radhamohan Behera	2102050051	Hal, Koraput
73	Abhisek Pradhan	2102050052	RSP, SAIL
74	Debasish kar	2102050053	HAL,Koraput
75	Debabrata sahu	2102050054	HAL,Koraput
76	Kishan kumar samal	2102050055	accenture
77	Ankita panda	2102050056	RSP, SAIL
78	Divya Prakash Bhoi	2102050057	HAL, Koraput
79	Ashutosh Behera	2102050058	RSP, SAIL
80	Priyanka Choudhury	2102050059	NALCO, Damonjodi
81	Mitali Madhusmita Maharana	2102050060	OHPC, BURLA
82	Prajna Priyadarshinee Sahoo	2102050062	SAIL, RSP
83	Sangam Panda	2102050063	JSW BPSL, JHARSUGUDA
84	shaswati bhoi	2102050064	HAL koraput
85	Vikash Kumar Lohani	2102050065	RSP , SAIL
86	Pritish Kumar Sahu	2102050066	RSP , SAIL
87	Asish Kumar padhi	2102050067	Nalco , Angul
88	Prabhu Prasad Behera	2102050069	Nalco , Angul
89	Sonali sahoo	2102050070	RSP, SAIL
90	Lipsa Suna	2102050071	TPWODL, Sambalpur
91	Nabagata Aishwarya	2102050072	OPTCL, Bhubaneswar
92	Umesh chandra mahanta	2203050001	RSP ,SAIL
93	Rohan Tripathy	2203050002	RSP ,SAIL
94	Bhabani Shankar meher	2203050004	RSP ,SAIL
95	Jyotishree panigrahi	2203050005	RSP ,SAIL
96	Subhransu Deheri	2203050007	RSP ,SAIL
97	Rudrapratap biswajit Swain	2102050035	RSP ,SAIL
98	Lagnajeet sahoo	2102050061	RSP ,SAIL
99	Hitesh Kumar padhi	2102050047	GTT Foundation
100	Santosh Kumar Nayak	2102050028	RSP,SAIL
101	SOMNATH PATTNAYAK	2102050045	GOOGLE LLC
102	Abhishek Samantaray	2102050020	Nalco, Angul
103	Aishwarya Panda	2002050085	JSL, Kalinganagar, Jajpur road
104	Adyashree Parida	2002050088	JSL , TPNODL
105	Aditi Panda	2002050090	Rourkela Steel Plant
106	lukesh kumar patra	2002050094	TPWODL
107	Ayush Chandra Singh	2002050102	general electric aerospace
108	Rosy Nahak	2002050106	IREL(Indian Rare Earth limit) and HAL
109	Animesh purty	2002050113	TPCODL ,Cuttack

110	Supriya Sahu	2002050115	OHPC,Burla
111	Swagatika Marei	2002050118	OHPC
112	Bikash Barik	2103050009	OHPC, Burla
113	Ayush Ranjan Behera	2103050010	Rourkela SAIL
114	Subham Saurava Panda	2002050124	Tata Power
115	Ayush Das	2002050125	HINDALCO
116	P Subhankar Mahabir	2002050126	Tata Power
117	Mandan Mishra	2002050127	SAIL Rourkela
118	Aleshz Panigrahi	2002050131	TP Western Odisha Distribution Limited, Burla
119	Srabanee Debata	2002050135	Nalco,Angul
120	Shakti sarathi Mohanty	2002050137	Ohpc,burla
121	Biswajit Mohanty	2002050139	HINDALCO, Hirakud
122	Subhra parida	2103050012	Railway,Sail
123	Jogeswar Karan	2103050013	OHPC,BURLA
124	Vishal Sikha	2103050007	Aadhunik Metaliks Limited
125	Baki Tirupathi	2004050001	NPTEL Swayam portal
126	Shreyansh Panda	2004050003	Odisha Hydro Power Corporation (OHPC), Burla
127	Binayak Dang	2004050004	Internshala
128	Aryan Kumar Pradhan	2004050005	Hindalco Hirakud & OHPC
129	Debasish Das	2004050010	OHPC
130	Amiya Prasad Dash	2004050011	TPWODL, SAMBALPUR
131	Nikhilesh Mahanta	2004050012	NALCO (National Aluminium Company Limited)
132	Anshuman behera	2004050015	Nalco angul
133	Suman Subhankar Tripathy	2004050021	HAL, Sunabeda
134	Arpita Panda	2004050023	TPSODL, Berhampur

Year 2021-22

SL. NO.	Name of the Student	Roll. No.	Name of the Internship Organization
1	SWARAJ PRADHAN	2002050082	OPTCL, BHUBANESWAR
2	Tej Narayan Mishra	2002050120	TATA STEEL, JAMSHEDPUR
3	Anshuman behera	2004050015	SAIL, ROURKELA
4	Smriti Panda	2004050024	OHPC, BURLA
5	Aleshz Panigrahi	2002050131	OPTCL, BHUBANESWAR
6	Jogeswar Karan	2103050013	HINDALCO INDUSTRIES LTD., HIRAKUD
7	Animesh Purty	2002050113	NALCO CPP DIVISION, ANGUL
8	Rosy Nahak	2002050106	SAIL, ROURKELA
9	Subhra Parida	2103050012	HAL, SUNABEDA
10	Nikhilesh Mahanta	2004050012	OPTCL, BHUBANESWAR
11	SHREYANSH PANDA	2004050003	OPTCL, BHUBANESWAR
12	Anshit Pradhan	2002050129	OPTCL, BHUBANESWAR
13	Praveen Kishan	2004050017	SAIL, ROURKELA
14	Adyashree Parida	2002050088	NALCO , ANGUL
15	Priyadarshi Matruprasad	2002050022	NALCO , ANGUL
16	S Sobha	2002050051	SAIL, ROURKELA
17	Bishnu Prasad Sahoo	2002050074	NALCO, ANGUL
18	Rajesh kumar Mohapatra	2103050001	PANTECH E LEARNING, CHENNAI
19	Shibananda Sahoo	2002050069	OHPC, BURLA
20	Swastik Mishra	2002050002	SAIL, ROURKELA
21	Priyabrata Barik	2002050061	OHPC, BURLA
22	Ashutosh Mahapatra	2002050064	OPTCL, BHUBANESWAR
23	Rajib sinha	2103050003	CTTC, BHUBANESWAR
24	Sameer kumar senapati	2002050014	NALCO, ANGUL
25	Amarnath Maharana	2002050011	OPTCL, BHUBANESWAR
26	Sohan Biswal	2002050070	OPTCL, BHUBANESWAR
27	Pritam Panda	2002050025	OPTCL, BHUBANESWAR
28	Monalipsa Sahoo	2002050081	SAIL, ROURKELA
29	Om Prakash Sahoo	2002050042	SAIL, ROURKELA
30	Saisumit Samantaray	2002050035	OPTCL, BHUBANESWAR
31	Sanjib Kumar Naik	2002050140	SAIL, ROURKELA
32	Amiya Prasad Dash	2004050011	SAIL, ROURKELA
33	Debasis padhi	2002050091	OPTCL, Bhubaneswar
34	Susmita Dash	2002050134	SAIL, ROURKELA
35	Somya Dipayan Majhi	2002050057	SAIL, ROURKELA
36	Sunidhi Chandel	2002050080	SAIL, ROURKELA
37	Minati Tanty	2002050104	SAIL, ROURKELA

38	Aditi panda	2002050090	SAIL, ROURKELA
39	Ritik Kumar Patel	2002050062	NALCO, ANGUL
40	Priyanka Bag	2002050107	OHPC, Burla

Year 2020-21

SL. NO.	Name of the Student	Roll. No.	Name of the Internship Organization
1	Basudev Raiguru	1902050111	BSNL, ALTTC,GAZIABAD
2	Amrityam Kar	1902050007	BSNL, ALTTC,GAZIABAD
3	Akantika Nirjharini Nayak	1902050032	NTPC, KANHIA
4	Bhabana Dash	1902050008	CTTC, BHUBANESWAR
5	Mansi Takaria	1902050011	BOLT IOT, BENGALURU
6	Asmita Meher	1902050014	INTERNSHALA, ONLINE
7	Ritulagna Tripathy	1902050022	CTTC, BHUBANESWAR
8	Abhyudaya Dash	1902050025	NPIU, NEW DELHI
9	Abhips raj sahoo	1902050026	CTTC, BHUBANESWAR
10	Sushree Subhashree Behera	1902050030	Vanderbilt University, ONLINE
11	Rimsy Swain	1902050033	OPTCL, BHUBANESWAR
12	Kamo Soren	1902050034	CTTC, BHUBANESWAR
13	AUROSMIT SAHOO	1902050037	NTPC, KANHIA
14	GOURAV KUMAR SAHOO	1902050042	Edupolis Technologies Pvt Ltd (Unschool), ONLINE
15	Sandeep singh	1902050046	BHEL, BHOPAL
16	Abhipsa Mishra	1902050048	NPIU, NEW DELHI
17	KIRTIK SAMAL	1902050049	BHEL, BHOPAL
18	Jitendra Prasad Muduli	1902050050	BHEL, BHOPAL
19	Samiksha Tripathy	1902050054	TPSDI, MUNDRA
20	Vibha Pandey	1902050051	BHEL, BHOPAL
21	Sidhartha suman Tripathy	1902050058	OpenEDG Python Institute., ONLINE
22	SUMIT KUMAR GIRI	1902050060	BSNL, ALTTC,GAZIABAD
23	Ankita Bhanja	2003050005	OPTCL, BHUBANESWAR
24	GANESWAR SAHOO	2003050008	GAIL, RANCHI
25	Anubhav Sethi	1902050043	CTTC, BHUBANESWAR
26	Ankita Bhanja	2003050005	OPTCL, BHUBANESWAR
27	M Vamsi	1902050015	Techgyan Technologies, NEW DELHI
28	Barsha Baishali Majhi	1802050113	OPTCL, BHUBANESWAR
29	Debashish Behera	1902050068	Pantech Prolabs India Pvt Ltd
30	Anwesha Masanta	1902050062	INTERNSHALA
31	Surya Prakash Dutta	1902050039	Verzeo
32	Banshidhar Barpanda	1902050038	BHEL, Bhopal
33	Madhushree Palit	1902111056	CTTC, BHUBANESWAR
34	Subhankar Das	1902050013	EDUSKILL
35	Mansi Takaria	1902050011	Inventrom Private Limited

3 COURSE OUTCOMES AND PROGRAM OUTCOMES (175)

Total

Define the Program specific outcomes

PSO1	Apply the knowledge of electric circuits, control systems, electrical machines, power electronics and power systems to solve complex engineering problems in the discipline of Electrical Engineering.
PSO2	Develop suitable techniques and cutting-edge engineering hardware and software tools in electrical engineering to solve practical problems.
PSO3	Aware of the impact of professional electrical engineering solutions on social, economic, environmental and technological sustainability.

3.1 Establish the correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes (25)

Inst

No. of Core Courses : 6	**C2 :** 2	**C3 :** 2	**C4 :** 2

Note : Number of Outcomes for a Course is expected to be around 6.

Course Name :	C2 01	Course Year :	2020-2021

Course Name	Statements
C2 01.1	Describe and analyze the performance of single phase transformers.
C2 01.2	Apply knowledge on the basic concepts of electromagnetic energy conversion and dc machines.
C2 01.3	Express and analyze the performance of DC generators.
C2 01.4	Describe and analyze the performance of DC motors.
C2 01.5	Define and analyze the performance of three phase transformers.

Course Name :	C2 02	Course Year :	2020-2021

Course Name	Statements
C2 02.1	Describe the components and working of hydro power plants.
C2 02.2	Describe the components and working of thermal power plants.
C2 02.3	Describe the components and working of nuclear, wind and solar power plants.
C2 02.4	Recognize electrical components in power generating stations.
C2 02.5	Apply knowledge on power generation planning and economics.

Course Name :	C3 01	Course Year :	2021-2022

Course Name	Statements
C3 01.1	Implement mathematical model of a physical system and its transfer function.
C3 01.2	Compute steady state error for different standard test signals and estimate time domain performance indices.
C3 01.3	Describe stability analysis using Routh-Hurwitz stability criterionandroot locus.
C3 01.4	Evaluate frequency domain analysis using Bode plot and Nyquist criteria.
C3 01.5	Design different controllers including PI, PD and PID controllers

Course Name :	C3 02	Course Year :	2021-2022

Course Name	Statements
C3 02.1	Describe the different components of a protection system.
C3 02.2	Evaluate fault current due to different types of fault in a network.
C3 02.3	Design the protection schemes for different power system components.
C3 02.4	Describe the principle of various types of circuit breakers.
C3 02.5	Design digital protection systems and know the use of wide-area measurements.

Course Name :	C4 01	Course Year :	2022-2023

Course Name	Statements
C4 01.1	Compute load flow solution by using different techniques.
C4 01.2	Assess the stability of a power system.
C4 01.3	Determine the economical load distribution between the generating buses incorporating the transmission losses.
C4 01.4	Compute the state of power system following the different types of faults.
C4 01.5	Describe automatic generation control schemes and methods to analyze active and reactive power control on a power system using simulation tools.

Course Name :	C4 02	Course Year :	2022-2023

Course Name	Statements
C4 02.1	Describe various types of insulating materials (gaseous, liquids, solids, vacuum, composites) and their applications in high-voltage equipment.
C4 02.2	Describe the breakdown phenomenon in air, solid and liquid insulation.
C4 02.3	Apply knowledge on applying techniques for generation of high voltage and high current.
C4 02.4	Describe basic measurement of high voltage and current for testing purposes.
C4 02.5	Describe testing high voltage electrical equipment with various testing devices.

Course Articulation Matrix

1 . course name : C201

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C201.1	Describe ar	3	3	2	1	1	2	1	-	-	-	-	1
C201.2	Apply know	3	3	2	1	1	2	1	-	-	-	-	1
C201.3	Express an	3	3	2	1	1	2	1	-	-	-	-	1
C201.4	Describe ar	3	3	2	1	1	2	1	-	-	-	-	1
C201.5	Define and	3	3	2	1	1	2	1	-	-	-	-	1
Average		**3.00**	**3.00**	**2.00**	**1.00**	**1.00**	**2.00**	**1.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.00**

2 . course name : C202

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C202.1	Describe th	3	3	2	1	1	2	1	-	-	-	-	1
C202.2	Describe th	3	3	2	1	1	2	1	-	-	-	-	1
C202.3	Describe th	3	3	2	1	1	2	1	-	-	-	-	1
C202.4	Recognize	3	3	2	1	1	2	1	-	-	-	-	1
C202.5	Apply know	3	3	2	1	1	2	1	-	-	-	-	1
Average		**3.00**	**3.00**	**2.00**	**1.00**	**1.00**	**2.00**	**1.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.00**

3 . course name : C301

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C301.1	Implement	3	3	2	1	1	2	1	-	-	-	-	1
C301.2	Compute st	3	3	2	1	1	2	1	-	-	-	-	1
C301.3	Describe st	3	3	2	1	1	2	1	-	-	-	-	1
C301.4	Evaluate fre	3	3	2	1	1	2	1	-	-	-	-	1
C301.5	Design diffe	3	3	2	1	1	2	1	-	-	-	-	1
Average		**3.00**	**3.00**	**2.00**	**1.00**	**1.00**	**2.00**	**1.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.00**

4 . course name : C302

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C302.1	Describe th	3	3	2	1	1	2	1	-	-	-	-	1
C302.2	Evaluate fa	3	3	2	1	1	2	1	-	-	-	-	1
C302.3	Design the	3	3	2	1	1	2	1	-	-	-	-	1
C302.4	Describe th	3	3	2	1	1	2	1	-	-	-	-	1
C302.5	Design digi	3	3	2	1	1	2	1	-	-	-	-	1
Average		**3.00**	**3.00**	**2.00**	**1.00**	**1.00**	**2.00**	**1.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.00**

5 . course name : C401

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C401.1	Compute lo	3	3	2	1	1	2	1	-	-	-	-	1
C401.2	Assess the	3	3	2	1	1	2	1	-	-	-	-	1
C401.3	Determine t	3	3	2	1	1	2	1	-	-	-	-	1
C401.4	Compute th	3	3	2	1	1	2	1	-	-	-	-	1
C401.5	Describe au	3	3	2	1	1	2	1	-	-	-	-	1
Average		**3.00**	**3.00**	**2.00**	**1.00**	**1.00**	**2.00**	**1.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.00**

6 . course name : C402

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C402.1	Describe va	3	3	2	1	1	2	1	-	-	-	-	1
C402.2	Describe th	3	3	2	1	1	2	1	-	-	-	-	1
C402.3	Apply know	3	3	2	1	1	2	1	-	-	-	-	1
C402.4	Describe ba	3	3	2	1	1	2	1	-	-	-	-	1
C402.5	Describe te	3	3	2	1	1	2	1	-	-	-	-	1
Average		**3.00**	**3.00**	**2.00**	**1.00**	**1.00**	**2.00**	**1.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.00**

1 . Course Name : C201

Course	PSO1	PSO2	PSO3
C201.1	3	3	3
C201.2	3	3	3
C201.3	3	3	3
C201.4	3	3	3
C201.5	3	3	3
Average	**3.00**	**3.00**	**3.00**

2 . Course Name : C202

Course	PSO1	PSO2	PSO3
C202.1	3	3	3
C202.2	3	3	3
C202.3	3	3	3
C202.4	3	3	3
C202.5	3	3	3
Average	**3.00**	**3.00**	**3.00**

3 . Course Name : C301

Course	PSO1	PSO2	PSO3
C301.1	3	3	3
C301.2	3	3	3
C301.3	3	3	3
C301.4	3	3	3
C301.5	3	3	3
Average	**3.00**	**3.00**	**3.00**

4 . Course Name : C302

Course	PSO1	PSO2	PSO3
C302.1	3	3	3
C302.2	3	3	3
C302.3	3	3	3
C302.4	3	3	3
C302.5	3	3	3
Average	**3.00**	**3.00**	**3.00**

5 . Course Name : C401

Course	PSO1	PSO2	PSO3
C401.1	3	3	3
C401.2	3	3	3
C401.3	3	3	3
C401.4	3	3	3
C401.5	3	3	3
Average	**3.00**	**3.00**	**3.00**

6 . Course Name : C402

Course	PSO1	PSO2	PSO3
C402.1	3	3	3
C402.2	3	3	3
C402.3	3	3	3
C402.4	3	3	3
C402.5	3	3	3
Average	**3.00**	**3.00**	**3.00**

Program Articulation Matrix

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BEE2101	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BPH2101	3	3	2	1	3	2	1	1	3	3	1	1
BHU2102	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	1	3	1	PO12
BMA2101	3	3	2	2	1	2	1	PO8	PO9	PO10	1	1
BME2101	3	3	2	1	2	PO6	PO7	PO8	3	1	PO11	1
BEE2191	3	3	2	1	3	2	1	1	3	3	1	1
BPH2191	3	3	2	1	3	2	1	1	3	3	1	1
BME2192	PO1	PO2	1	PO4	2	2	1	1	3	1	2	1
BHU2191	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	1	3	1	PO12
BEC2101	3	2	3	3	2	1	2	PO8	PO9	PO10	PO11	1
BCH2101	3	3	1	0	0	0	1	0	0	1	1	1
BCE2102	3	2	2	2	1	2	3	1	2	2	2	3
BMA2201	3	3	2	2	1	2	1	PO8	PO9	PO10	1	1
BCS2102	3	3	3	3	2	PO6	PO7	2	3	PO10	PO11	3
BEC2191	3	2	3	3	2	1	2	PO8	PO9	PO10	PO11	1
BCH2191	3	1	2	PO4	1	PO6	2	PO8	1	PO10	1	PO12
BCE2192	3	2	2	2	1	1	3	1	2	2	2	2
BCS2191	3	3	3	3	2	PO6	PO7	2	3	PO10	PO11	3
BHU2301	PO1	PO2	PO3	PO4	PO5	PO6	3	3	3	3	3	3
BEE2302	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2303	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BMA2301	3	3	2	2	1	2	1	PO8	PO9	PO10	1	1
BEE2305	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2392	3	3	2	1	3	2	1	1	3	3	1	1
BEE2393	3	3	2	1	3	2	1	1	3	3	1	1
BEE2394	3	3	2	1	3	2	1	1	3	3	1	1
BEE2395	3	3	2	1	3	2	1	1	3	3	1	1
BHU2303	PO1	PO2	PO3	PO4	PO5	3	2	1	1	1	3	2
BEE2401	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2402	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BMA2401	3	3	2	2	1	2	1	PO8	PO9	PO10	1	1
BEE2403	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2491	3	3	2	1	3	2	1	1	3	3	1	1
BEE2492	3	3	2	1	3	2	1	1	3	3	1	1
BEE2509	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2510	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2511	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2512	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEL2505	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2594	3	3	2	1	3	2	1	1	3	3	1	1
BEE2597	3	3	2	1	3	2	1	1	3	3	1	1
BEE2598	3	3	2	1	3	2	1	1	3	3	1	1
BEE2611	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2612	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2613	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2614	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1

BCM2609	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BHU2502	PO1	PO2	PO3	PO4	PO5	PO6	3	3	3	3	3	3
BEE2697	3	3	2	1	3	2	1	1	3	3	1	1
BEE2698	3	3	2	1	3	2	1	1	3	3	1	1
BEE2699	3	3	2	1	3	2	1	1	3	3	1	1
BEE2702	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2714	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2713	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BME2710	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2793	3	3	2	1	3	2	1	1	3	3	1	1
BEE2794	3	3	3	3	3	3	3	3	3	3	3	3
BEE2795	3	3	3	3	3	3	3	3	3	3	3	3
BEE2806	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2807	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BPE2808	3	3	2	1	1	2	1	PO8	PO9	PO10	PO11	1
BEE2894	3	3	3	3	3	3	3	3	3	3	3	3
BEE2895	3	3	3	3	3	3	3	3	3	3	3	3
BHU2501	PO1	PO2	PO3	PO4	PO5	PO6	3	3	3	3	3	3

Course	PSO1	PSO2	PSO3
BCE2102	PSO1	PSO2	PSO3
BCE2192	PSO1	PSO2	PSO3
BCH2101	PSO1	PSO2	PSO3
BCH2191	PSO1	PSO2	PSO3
BCM2609	PSO1	PSO2	PSO3
BCS2102	3	3	3
BCS2191	3	3	3
BEC2101	3	3	3
BEC2191	3	3	3
BEE2101	3	3	3
BEE2191	3	3	3
BEE2302	3	3	3
BEE2303	3	3	3
BEE2305	3	3	3
BEE2392	3	3	3
BEE2393	3	3	3
BEE2394	3	3	3
BEE2395	3	3	3
BEE2401	3	3	3
BEE2402	3	3	3
BEE2403	3	3	3
BEE2491	3	3	3
BEE2492	3	3	3
BEE2509	3	3	3
BEE2510	3	3	3
BEE2511	3	3	3
BEE2512	3	3	3
BEE2594	3	3	3

BEE2597	3	3	3
BEE2598	3	3	3
BEE2611	3	3	3
BEE2612	3	3	3
BEE2613	3	3	3
BEE2614	3	3	3
BEE2697	3	3	3
BEE2698	3	3	3
BEE2699	3	3	3
BEE2702	3	3	3
BEE2713	3	3	3
BEE2714	3	3	3
BEE2793	3	3	3
BEE2794	3	3	3
BEE2795	3	3	3
BEE2806	3	3	3
BEE2807	3	3	3
BEE2894	3	3	3
BEE2895	3	3	3
BEL2505	3	3	3
BHU2102	PSO1	PSO2	PSO3
BHU2191	PSO1	PSO2	PSO3
BHU2301	PSO1	PSO2	PSO3
BHU2303	PSO1	PSO2	PSO3
BHU2501	PSO1	PSO2	PSO3
BHU2502	PSO1	PSO2	PSO3
BMA2101	3	3	3
BMA2201	3	3	3
BMA2301	3	3	3
BMA2401	3	3	3
BME2101	PSO1	PSO2	PSO3
BME2192	PSO1	PSO2	PSO3
BME2710	PSO1	PSO2	PSO3
BPE2808	PSO1	PSO2	PSO3
BPH2101	PSO1	PSO2	PSO3
BPH2191	PSO1	PSO2	PSO3

3.2 Attainment of Course Outcomes (75)

Inst

All the courses offered in the program curriculum are broadly classified into 3 categories with their individual assessment methods:

1. Theory courses
2. Sessional courses
3. Project

Course outcome attainment for each type of course is discussed below.

Attainment of course outcomes for theory courses:

Course Category	Type of Assessment	Assessment Tools	Marks	Category	CO Attainment type
Theory	Direct	Assignments, Quiz tests (Formative assessments)	20	Cumulative Internal Examination (CIE)	Formative type
		Mid Semester Examination	30	Cumulative Internal Examination (CIE)	Direct CO Att. (70% weightage)
		End Semester Examination	50	Semester End Examination (SEE)	
	Indirect	Course Completion feedback			Indirect CO Att. (30% weightage)

Data Acquisition Process CO attainment of theory courses:

- For direct CO attainment, all the questions of mid-semester and end semesters are mapped with course outcomes during the preparation of the question paper.
- For the indirect CO attainment, semester-end feedbacks are collected by the department to acquire opinions about each CO from the students.
- During Covid 19, marks obtained by all the students from the online examinations are shared by the exam coordinator for CO attainment analysis.
- Final computation of course outcomes is done through spreadsheets by the concerned faculty. CO attainment information will be compiled by the course coordinators and information passed on to the School Quality Assurance Cell and Program Assessment Committee for subsequent decisions and actions.
- The calculation for attainments is performed after the declaration of end-semester examination results. All documentations related to attainments are maintained by the course coordinators.

Attainment Process of a Theory Course:

Threshold levels for direct CO Attainment	
Level= 3	100 ≥ Percentage attainment in each CO ≥ $Threshold_1$
Level= 2	$Threshold_1$ > Percentage attainment in each CO ≥ $Threshold_2$
Level= 1	$Threshold_2$ > Percentage attainment in each CO > 0

($Threshold_1$ =70%, $Threshold_2$=40%)

Threshold values are decided by the Board of Study and may be altered to other values depending on the complexities and hardness of questions in the Mid and End Semester Examinations. Direct CO attainment is calculated for each student as shown below

$$\text{Percentage attainment in each CO} = \frac{\text{Total marks obtained by the student corresponding to the particular CO}}{\text{Total marks allotted to questions mapped the particular CO}}$$

Attainment of each CO = Average of the levels obtained by all the students
Direct CO attainment of a course= Average of all five COs

Threshold levels for indirect CO Attainment	
Level= 3	100 ≥ Percentage attainment in each CO ≥ $Threshold_1$
Level= 2	$Threshold_1$ > Percentage attainment in each CO ≥ $Threshold_2$
Level= 1	$Threshold_2$ > Percentage attainment in each CO > 0

($Threshold_1$ =70%, $Threshold_2$=40%)

Attainment of each CO = Average of the levels obtained by all the students
Indirect CO attainment of a course= Average of all five COs

Final CO Attainment level= (0.7) * Direct CO Attainment + (0.3) * Indirect CO Attainment

Attainment of course outcomes for Sessional courses:

The course outcome attainment is assessed based on the student's performance in cumulative internal examination (which included continuous assessment through experimental activities/tasks) and semester-end examination. A summary of different assessment components and respective weightage is given in the table below.

Course Category	Assessment Tools	Marks	Category	CO Attainment type

Sessional	For every experiment, evaluation is to be done for corresponding Course Outcomes through the performance of students, viva, record marks	80	Cumulative Internal Examination (CIE)	Direct CO Att. (70% weightage)
	End Semester Examination (Viva/ Test / Quiz)	20	Semester End Examination (SEE)	
	Course Completion feedback			Indirect CO Att. (30% weightage)

The experimental activities and tasks are mapped to different Course Outcomes (COs) and are used to compute the class average corresponding to every CO in the course as described below: Cumulative Internal Examination: The class average corresponding to each CO is assessed as below.

Threshold levels for Attainment		
Level 3	100 ≥ Percentage attainment in each CO ≥ $Threshold_1$	$Threshold_1$ = 80% $Threshold_2$ = 60%
Level 2	$Threshold_1$ > Percentage attainment in each CO ≥ $Threshold_2$	
Level 1	$Threshold_2$ > Percentage attainment in each CO > 0	

($Threshold_1$ =70%, $Threshold_2$=40%)

Threshold values are decided by the Board of Study and may be altered to other values depending on the complexities and hardness of experiments.
Final CO Attainment level= (0.7) * Direct CO Attainment + (0.3) * Indirect CO Attainment

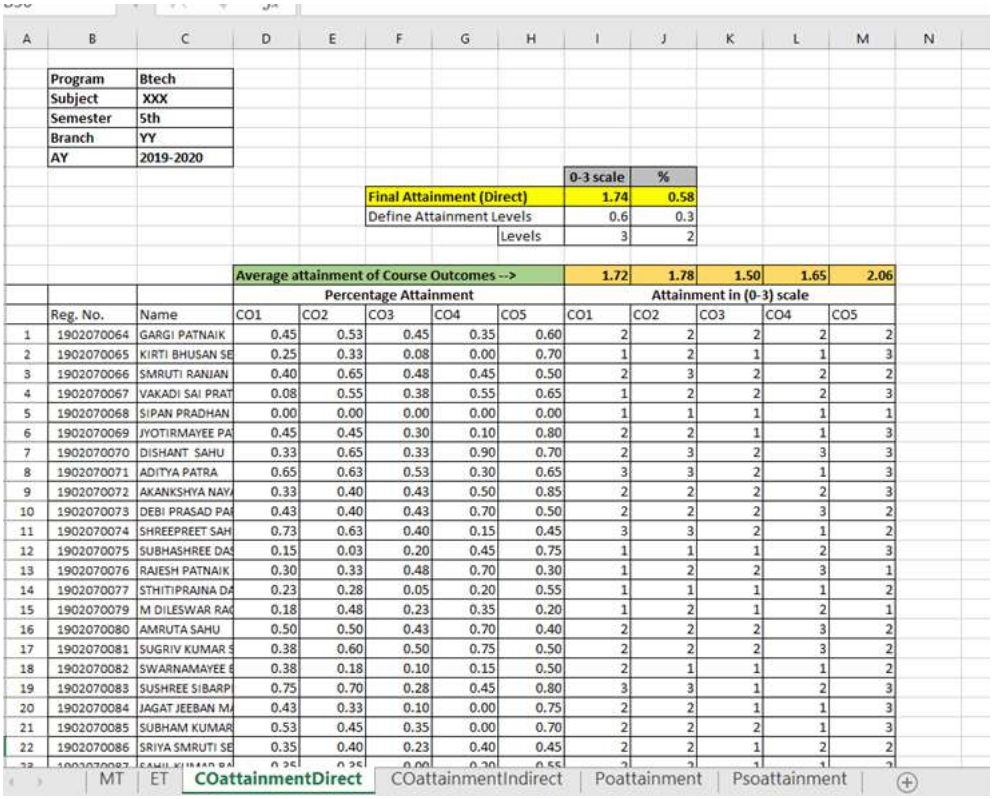
Attainment of course outcomes for Projects:

A summary of different assessment components and respective weightage is given in the table below.

Course Category	**Assessment Tools**	**Marks**	**Category**	**CO Attainment type**
Project	For a project done by a student, evaluation is to be done for corresponding Course Outcomes through the performance of students. This evaluation is done by the respective guide.	80	Cumulative Internal Examination (CIE)	Direct CO Att. (70% weightage)
	End Semester Examination (presentation, QnA)	20	Semester End Examination (SEE)	
	Course Completion feedback			Indirect CO Att. (30% weightage)

Final CO Attainment level= (0.7) * Direct CO Attainment + (0.3) * Indirect CO Attainment

Example of Course Outcomes (COs) Attainment of a theory course: Target CO att=1.8

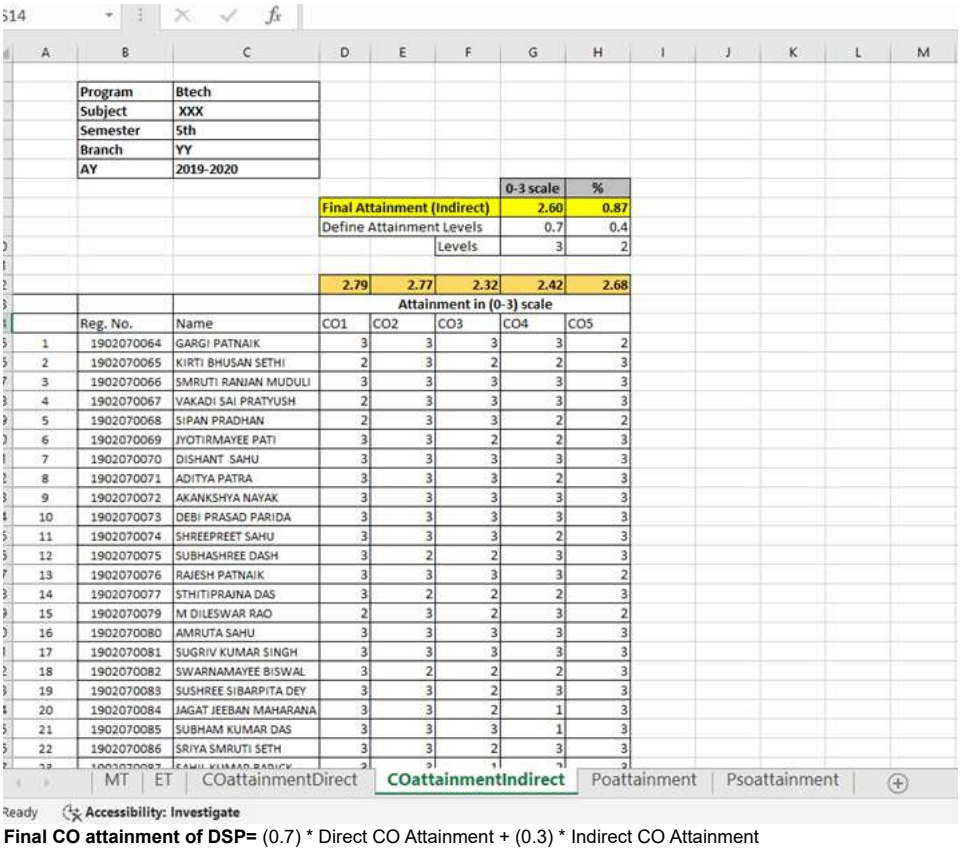


Program	Btech
Subject	XXX
Semester	5th
Branch	YY
AY	2019-2020

	0-3 scale	%
Final Attainment (Direct)	1.74	0.58
Define Attainment Levels	0.6	0.3
Levels	3	2

			Average attainment of Course Outcomes -->					1.72	1.78	1.50	1.65	2.06
			Percentage Attainment					Attainment in (0-3) scale				
	Reg. No.	Name	CO1	CO2	CO3	CO4	CO5	CO1	CO2	CO3	CO4	CO5
1	1902070064	GARGI PATNAIK	0.45	0.53	0.45	0.35	0.60	2	2	2	2	2
2	1902070065	KIRTI BHUSAN SE	0.25	0.33	0.08	0.00	0.70	1	2	1	1	3
3	1902070066	SMRUTI RANJAN	0.40	0.65	0.48	0.45	0.50	2	3	2	2	2
4	1902070067	VAKADI SAI PRAT	0.08	0.55	0.38	0.55	0.65	1	2	2	2	3
5	1902070068	SIPAN PRADHAN	0.00	0.00	0.00	0.00	0.00	1	1	1	1	1
6	1902070069	JYOTIRMAYEE PA	0.45	0.45	0.30	0.10	0.80	2	2	1	1	3
7	1902070070	DISHANT SAHU	0.33	0.65	0.33	0.90	0.70	2	3	2	3	3
8	1902070071	ADITYA PATRA	0.65	0.63	0.53	0.30	0.65	3	3	2	1	3
9	1902070072	AKANKSHYA NAY	0.33	0.40	0.43	0.50	0.85	2	2	2	2	3
10	1902070073	DEBI PRASAD PA	0.43	0.40	0.43	0.70	0.50	2	2	2	3	2
11	1902070074	SHREEPREET SAH	0.73	0.63	0.40	0.15	0.45	3	3	2	1	2
12	1902070075	SUBHASHREE DAS	0.15	0.03	0.20	0.45	0.75	1	1	1	2	3
13	1902070076	RAJESH PATNAIK	0.30	0.33	0.48	0.70	0.30	1	2	2	3	1
14	1902070077	STHITIPRAJNA DA	0.23	0.28	0.05	0.20	0.55	1	1	1	1	2
15	1902070079	M DILESWAR RAO	0.18	0.48	0.23	0.35	0.20	1	2	1	2	1
16	1902070080	AMRUTA SAHU	0.50	0.50	0.43	0.70	0.40	2	2	2	3	2
17	1902070081	SUGRIV KUMAR S	0.38	0.60	0.50	0.75	0.50	2	2	2	3	2
18	1902070082	SWARNAMAYEE S	0.38	0.18	0.10	0.15	0.50	2	1	1	1	2
19	1902070083	SUSHREE SIBARP	0.75	0.70	0.28	0.45	0.80	3	3	1	2	3
20	1902070084	JAGAT JEEBAN MA	0.43	0.33	0.10	0.00	0.75	2	2	1	1	3
21	1902070085	SUBHAM KUMAR	0.53	0.45	0.35	0.00	0.70	2	2	2	1	3
22	1902070086	SRIYA SMRUTI SE	0.35	0.40	0.23	0.40	0.45	2	2	1	2	2

MT | ET | COattainmentDirect | COattainmentIndirect | Poattainment | Psoattainment



Program	Btech
Subject	XXX
Semester	5th
Branch	YY
AY	2019-2020

	0-3 scale	%
Final Attainment (Indirect)	2.60	0.87
Define Attainment Levels	0.7	0.4
Levels	3	2

			2.79	2.77	2.32	2.42	2.68
			Attainment in (0-3) scale				
	Reg. No.	Name	CO1	CO2	CO3	CO4	CO5
1	1902070064	GARGI PATNAIK	3	3	3	3	2
2	1902070065	KIRTI BHUSAN SETHI	2	3	2	2	3
3	1902070066	SMRUTI RANJAN MUDULI	3	3	3	3	3
4	1902070067	VAKADI SAI PRATYUSH	2	3	3	3	3
5	1902070068	SIPAN PRADHAN	2	3	3	2	2
6	1902070069	JYOTIRMAYEE PATI	3	3	2	2	3
7	1902070070	DISHANT SAHU	3	3	3	3	3
8	1902070071	ADITYA PATRA	3	3	3	2	3
9	1902070072	AKANKSHYA NAYAK	3	3	3	3	3
10	1902070073	DEBI PRASAD PARIDA	3	3	3	3	3
11	1902070074	SHREEPREET SAHU	3	3	3	2	3
12	1902070075	SUBHASHREE DASH	3	2	2	3	3
13	1902070076	RAJESH PATNAIK	3	3	3	3	2
14	1902070077	STHITIPRAJNA DAS	3	2	2	2	3
15	1902070079	M DILESWAR RAO	2	3	2	3	2
16	1902070080	AMRUTA SAHU	3	3	3	3	3
17	1902070081	SUGRIV KUMAR SINGH	3	3	3	3	3
18	1902070082	SWARNAMAYEE BISWAL	3	2	2	2	3
19	1902070083	SUSHREE SIBARPITA DEY	3	3	2	3	3
20	1902070084	JAGAT JEEBAN MAHARANA	3	3	2	1	3
21	1902070085	SUBHAM KUMAR DAS	3	3	3	1	3
22	1902070086	SRIYA SMRUTI SETH	3	3	2	3	3

MT | ET | COattainmentDirect | COattainmentIndirect | Poattainment | Psoattainment

Ready Accessibility: Investigate

Final CO attainment of DSP= (0.7) * Direct CO Attainment + (0.3) * Indirect CO Attainment
= (0.7) * 1.74 +(0.3) * 2.60 =**1.99** (target Attained)

3.2.2 Record the attainment of Course Outcomes of all courses with respect to set attainment levels (65) Inst

The attainment of course outcomes for all courses with respect to set attainment levels is computed using the following steps.
1. The program though its Board of Studies recrords the attainment level for all the programs in its Board of Studies meetings.
2. Based on the attainment level, the course outcome attainment level is computed for all the courses form mid semester and end semester examinations.
3. The target is set based on the percentage of marks for achieving the attainment level 1/2/3.
4. The final attainment is a combination of attainment in both mid semester (CIE) and end semester examinations (SEE).
5. The summative assessment only are used for direct attainment computation. Formative assessments are considered to be enabling the students to perform well in CIE and SEEs and hence are implicit to CO outcome attainment.
6. The indirect attainment for Course Outcomes is measured based on survey questionairre based on CO statements though various methods such as google forms, printed questionairre or directly asking the students.
7. The final course outcome attainment is computed giving 70% weightage to direct attainment though examination and 30% weightage to indirect attainment through surveys.

3.3 Attainment of Program Outcomes and Program Specific Outcomes (75)

3.3.1 Describe assessment tools and processes used for measuring the attainment of each Program Outcome and Program Specific Outcomes (10) Inst

The assessment of attainment of Program Outcomes and Program Specific Outcomes are done both through direct and indirect methods using the following steps.

1. From the direct and indirect attainment of COs, the final attainment of COs is obtained for each course.
2. Using the PAM row for that course, the direct attainment of Program Outcomes is obtained.
3. Various surveys are conducted for obtaining the indirect attainment of Program Outcomes, namely, Student Exit Survey, Alumni Survey and Employer Survey.
4. The final attainment is the average of the direct and indirect attainment of Program Outcomes.
5. The attainment of Program Specific Outcomes are obtained using steps similar to those of Program Outcomes.

3.3.2 Provide results of evaluation of each PO & PSO (65) Inst

PO Attainment

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BEE2101	2.651	2.651	1.767	0.884	0.884	1.767	0.884	PO8	PO9	PO10	PO11	0.884
BPH2101	2.515	2.515	1.677	0.838	2.515	1.677	0.838	0.838	2.515	2.515	0.838	0.838
BHU2102	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	0.862	2.587	0.862	PO12
BMA2101	2.478	2.478	1.652	1.652	0.826	1.652	0.826	PO8	PO9	PO10	0.826	0.826
BME2101	2.815	2.815	1.877	0.938	1.877	PO6	PO7	PO8	2.815	0.938	PO11	0.938
BEE2191	2.763	2.763	1.842	0.921	2.763	1.842	0.921	0.921	2.763	2.763	0.921	0.921
BPH2191	2.679	2.679	1.786	0.893	2.679	1.786	0.893	0.893	2.679	2.679	0.893	0.893
BME2192	PO1	PO2	0.928	PO4	1.855	1.855	0.928	0.928	2.783	0.928	1.855	0.928
BHU2191	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	0.896	2.687	0.896	PO12
BEC2101	2.557	1.705	2.557	2.557	1.705	0.852	1.705	PO8	PO9	PO10	PO11	0.852
BCH2101	2.194	2.194	0.731	PO4	PO5	PO6	0.731	PO8	PO9	0.731	0.731	0.731
BCE2102	2.637	1.758	1.758	1.758	0.879	1.758	2.637	0.879	1.758	1.758	1.758	2.637
BMA2201	2.403	2.403	1.602	1.602	0.801	1.602	0.801	PO8	PO9	PO10	0.801	0.801
BCS2102	2.385	2.385	2.385	2.385	1.590	PO6	PO7	PO8	1.590	PO10	PO11	2.385
BEC2191	2.801	1.867	2.801	2.801	1.867	0.934	1.867	PO8	PO9	PO10	PO11	0.934
BCH2191	2.735	0.912	1.823	PO4	0.912	PO6	1.823	PO8	0.912	PO10	0.912	PO12
BCE2192	2.888	1.925	1.925	1.925	0.963	0.963	2.888	0.963	1.925	1.925	1.925	1.925
BCS2191	2.809	2.809	2.809	2.809	1.873	PO6	PO7	1.873	2.809	PO10	PO11	2.809
BHU2301	PO1	PO2	PO3	PO4	PO5	PO6	2.078	2.078	2.078	2.078	2.078	2.078
BEE2302	2.251	2.251	1.501	0.750	0.750	1.501	0.750	PO8	PO9	PO10	PO11	0.750
BEE2303	2.172	2.172	1.448	0.724	0.724	1.448	0.724	PO8	PO9	PO10	PO11	0.724
BMA2301	2.246	2.246	1.497	1.497	0.749	1.497	0.749	PO8	PO9	PO10	0.749	0.749
BEE2305	2.171	2.171	1.447	0.724	0.724	1.447	0.724	PO8	PO9	PO10	PO11	0.724
BEE2392	2.877	2.877	1.918	0.959	2.877	1.918	0.959	0.959	2.877	2.877	0.959	0.959
BEE2393	2.873	2.873	1.915	0.958	2.873	1.915	0.958	0.958	2.873	2.873	0.958	0.958
BEE2394	2.725	2.725	1.817	0.908	2.725	1.817	0.908	0.908	2.725	2.725	0.908	0.908
BEE2395	2.774	2.774	1.849	0.925	2.774	1.849	0.925	0.925	2.774	2.774	0.925	0.925
BHU2303	PO1	PO2	PO3	PO4	PO5	2.179	1.453	0.726	0.726	0.726	2.179	1.453
BEE2401	2.420	2.420	1.613	0.807	0.807	1.613	0.807	PO8	PO9	PO10	PO11	0.807
BEE2402	2.224	2.224	1.483	0.741	0.741	1.483	0.741	PO8	PO9	PO10	PO11	0.741
BMA2401	2.322	2.322	1.548	1.548	0.774	1.548	0.774	PO8	PO9	PO10	0.774	0.774
BEE2403	2.136	2.136	1.424	0.712	0.712	1.424	0.712	PO8	PO9	PO10	PO11	0.712
BEE2491	2.832	2.832	1.888	0.944	2.832	1.888	0.944	0.944	2.832	2.832	0.944	0.944
BEE2492	2.752	2.752	1.835	0.917	2.752	1.835	0.917	0.917	2.752	2.752	0.917	0.917
BEE2509	2.280	2.280	1.520	0.760	0.760	1.520	0.760	PO8	PO9	PO10	PO11	0.760
BEE2510	2.629	2.629	1.753	0.876	0.876	1.753	0.876	PO8	PO9	PO10	PO11	0.876
BEE2511	2.713	2.713	1.809	0.904	0.904	1.809	0.904	PO8	PO9	PO10	PO11	0.904
BEE2512	2.795	2.795	1.863	0.932	0.932	1.863	0.932	PO8	PO9	PO10	PO11	0.932
BEL2505	2.395	2.395	1.597	0.798	0.798	1.597	0.798	PO8	PO9	PO10	PO11	0.798
BEE2594	2.614	2.614	1.743	0.871	2.614	1.743	0.871	0.871	2.614	2.614	0.817	0.871
BEE2597	2.786	2.786	1.857	0.929	2.786	1.857	0.929	0.929	2.786	2.786	0.929	0.929
BEE2598	2.713	2.713	1.809	0.904	2.713	1.809	0.904	0.904	2.713	2.713	0.904	0.904
BHU2501	PO1	PO2	PO3	PO4	PO5	PO6	2.678	2.678	2.678	2.678	2.678	2.678
BEE2611	2.482	2.482	1.655	0.827	0.827	1.655	0.827	PO8	PO9	PO10	PO11	0.827
BEE2612	2.507	2.507	1.671	0.836	0.836	1.671	0.836	PO8	PO9	PO10	PO11	0.836

BEE2613	2.280	2.280	1.520	0.760	0.760	1.520	0.760	PO8	PO9	PO10	PO11	0.760
BEE2614	2.372	2.372	1.581	0.791	0.791	1.581	0.791	PO8	PO9	PO10	PO11	0.791
BCM2609	2.179	2.179	1.453	0.726	0.726	1.453	0.726	PO8	PO9	PO10	PO11	0.726
BHU2502	PO1	PO2	PO3	PO4	PO5	PO6	2.629	2.692	2.692	2.692	2.692	2.692
BEE2697	2.652	2.652	1.768	0.884	2.652	1.768	0.884	0.884	2.652	2.652	0.884	0.884
BEE2698	2.494	2.494	1.663	0.831	2.494	1.663	0.831	0.831	2.494	2.494	0.831	0.831
BEE2699	2.777	2.777	1.851	0.926	2.777	1.851	0.926	0.926	2.777	2.777	0.926	0.926
BEE2702	2.390	2.390	1.593	0.797	0.797	1.593	0.797	PO8	PO9	PO10	PO11	0.797
BEE2714	2.395	2.395	1.597	0.798	0.798	1.597	0.798	PO8	PO9	PO10	PO11	0.798
BEE2713	2.301	2.301	1.534	0.767	0.767	1.534	0.767	PO8	PO9	PO10	PO11	0.767
BME2710	2.425	2.425	1.617	0.808	0.808	1.617	0.808	PO8	PO9	PO10	PO11	0.808
BEE2793	2.777	2.777	1.851	0.926	2.777	1.851	0.926	0.926	2.777	2.777	0.926	0.926
BEE2794	2.457	2.457	2.457	2.457	2.457	2.457	2.457	2.457	2.457	2.457	2.457	2.457
BEE2795	2.720	2.720	2.720	2.720	2.720	2.720	2.720	2.720	2.720	2.720	2.720	2.720
BEE2806	2.360	2.360	1.573	0.787	0.787	1.573	0.787	PO8	PO9	PO10	PO11	0.787
BEE2807	2.457	2.457	1.638	0.819	0.819	1.638	0.819	PO8	PO9	PO10	PO11	0.819
BPE2808	2.640	2.640	1.760	0.880	0.880	1.760	0.880	PO8	PO9	PO10	PO11	0.880
BEE2894	2.377	2.377	2.377	2.377	2.377	2.377	2.377	2.377	2.377	2.377	2.377	2.377
BEE2895	2.380	2.380	2.380	2.380	2.380	2.380	2.380	2.380	2.380	2.380	2.380	2.380

PO Attainment Indirect

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Alumni Surv	2.57	2.69	2.14	2.67	2.84	2.94	2.87	2.39	2.54	2.56	2.87	2.31
Employer S	2.47	2.54	2.68	2.57	2.64	2.78	2.43	2.62	2.67	2.39	2.76	2.41
Exit Survey	2.71	2.87	2.65	2.91	2.74	2.35	2.87	2.33	2.73	2.78	2.46	2.76

PO Attainment Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
InDirect Attainment	2.58	2.70	2.49	2.72	2.74	2.69	2.72	2.45	2.65	2.58	2.70	2.49
Direct Attainment	2.53	2.44	1.78	1.18	1.57	1.71	1.16	1.33	2.37	2.36	1.32	1.15

PSO Attainment

Course	PSO1	PSO2	PSO3
BEE2101	2.65	2.65	2.65
BPH2101	PSO1	PSO2	PSO3
BHU2102	PSO1	PSO2	PSO3
BMA2101	2.48	2.48	2.48
BME2101	PSO1	PSO2	PSO3
BEE2191	2.76	2.76	2.76
BPH2191	PSO1	PSO2	PSO3
BME2192	PSO1	PSO2	PSO3
BHU2191	PSO1	PSO2	PSO3
BEC2101	2.56	2.56	2.56
BCH2101	PSO1	PSO2	PSO3
BCE2102	PSO1	PSO2	PSO3
BMA2201	2.40	2.40	2.40
BCS2102	2.39	2.39	2.39
BEC2191	2.80	2.80	2.80
BCH2191	PSO1	PSO2	PSO3
BCE2192	PSO1	PSO2	PSO3

BCS2191	2.81	2.81	2.81
BHU2301	PSO1	PSO2	PSO3
BEE2302	2.25	2.25	2.25
BEE2303	2.17	2.17	2.17
BMA2301	2.25	2.25	2.25
BEE2305	2.17	2.17	2.17
BEE2392	2.88	2.88	2.88
BEE2393	2.87	2.87	2.87
BEE2394	2.73	2.73	2.73
BEE2395	2.77	2.77	2.77
BHU2303	PSO1	PSO2	PSO3
BEE2401	2.42	2.42	2.42
BEE2402	2.22	2.22	2.22
BMA2401	2.32	2.32	2.32
BEE2403	2.14	2.14	2.14
BEE2491	2.83	2.83	2.83
BEE2492	2.75	2.75	2.75
BEE2509	2.28	2.28	2.28
BEE2510	2.63	2.63	2.63
BEE2512	2.80	2.80	2.80
BEE2511	2.71	2.71	2.71
BEL2505	2.40	2.40	2.40
BHU2501	PSO1	PSO2	PSO3
BEE2594	2.61	2.61	2.61
BEE2597	2.79	2.79	2.79
BEE2598	2.71	2.71	2.71
BEE2611	2.48	2.48	2.48
BEE2612	2.51	2.51	2.51
BEE2613	2.28	2.28	2.28
BEE2614	2.37	2.37	2.37
BCM2609	PSO1	PSO2	PSO3
BHU2502	PSO1	PSO2	PSO3
BEE2697	2.65	2.65	2.65
BEE2698	2.49	2.49	2.49
BEE2699	2.77	2.77	2.77
BEE2702	2.39	2.39	2.39
BEE2714	2.39	2.39	2.39
BEE2713	2.30	2.30	2.30
BME2710	2.42	2.42	2.42
BEE2794	2.45	2.45	2.45
BEE2793	2.77	2.77	2.77
BEE2793	2.77	2.77	2.77
BEE2795	2.72	2.72	2.72
BEE2806	2.36	2.36	2.36
BEE2807	2.45	2.45	2.45
BPE2808	2.64	2.64	2.64
BEE2894	2.37	2.37	2.37
BEE2895	2.38	2.38	2.38

PSO Attainment Indirect

Survey	PSO1	PSO2	PSO3
Exit Survey	2.71	2.87	2.65
Alumni Survey	2.57	2.69	2.14
Employer Survey	2.47	2.54	2.68

PSO Attainment Level

Course	PSO1	PSO2	PSO3
Direct Attainment	2.53	2.53	2.53
InDirect Attainment	2.58	2.70	2.49

4 STUDENTS' PERFORMANCE (100) Tot

Table 4.1

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2023-24 (CAY)	2022-23 (CAYm1)	2021-22 (CAYm2)	2020-21 (CAYm3)	2019-20 (CAYm4)	2018-19 (CAYm5)	2017-18 (CAYm6)
Sanctioned intake of the program(N)	120	120	120	120	120	120	120
Total number of students admitted in first year minus number of students migrated to other programs/ institutions plus No. of students migrated to this program (N1)	120	121	120	111	122	116	99
Number of students admitted in 2nd year in the same batch via lateral entry (N2)	0	11	12	9	12	11	21
Separate division students, If applicable (N3)	36	36	6	6	6	6	6
Total number of students admitted in the programme(N1 + N2 + N3)	156	168	138	126	140	133	126

Table 4.2

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	Number of students who have successfully graduated without backlogs in any semester/ year of study (Without Backlog means no compartment or failures in any semester/ year of study)			
		I year	II year	III year	IV year
2023-24 (CAY)	156				
2022-23 (CAYm1)	168	115			
2021-22 (CAYm2)	138	117	132		
2020-21 (CAYm3)	126	109	118	116	
2019-20 (LYG)	140	117	129	126	125
2018-19 (LYGm1)	133	116	127	122	121
2017-18 (LYGm2)	126	99	123	122	121

Table 4.3

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	Number of students who have successfully graduated in stipulated period of study) [Total of with Backlog + without Backlog]			
		I year	II year	III year	IV year
2023-24 (CAY)	156				
2022-23 (CAYm1)	168	117			
2021-22 (CAYm2)	138	120	135		
2020-21 (CAYm3)	126	109	120	120	
2019-20 (LYG)	140	122	136	132	132
2018-19 (LYGm1)	133	116	129	123	123
2017-18 (LYGm2)	126	99	124	121	121

4.1 Enrolment Ratio (20)

Inst

	N (From Table 4.1)	N1 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2023-24 (CAY)	120	120	100.00
2022-23 (CAYm1)	120	121	100.83
2021-22 (CAYm2)	120	120	100.00

Average [(ER1 + ER2 + ER3) / 3] : 100.28

Assessment : 20.00

4.2 Success Rate in the stipulated period of the program (20)

4.2.1 Success rate without backlogs in any semester / year of study (15)

Inst

Item	Latest Year of Graduation, LYG (2019-20)	Latest Year of Graduation minus 1, LYGm1 (2018-19)	Latest Year of Graduation minus 2 LYGm2 (2017-18)
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable	140.00	133.00	126.00
Y Number of students who have graduated without backlogs in the stipulated period	125.00	121.00	121.00
Success Index [SI = Y / X]	0.89	0.91	0.96

Average SI [(SI1 + SI2 + SI3) / 3] : 0.92

Assessment [15 * Average SI] : 13.80

4.2.2 Sucess rate in stipulated period (5)

In

Item	Latest Year of Graduation, LYG (2019-20)	Latest Year of Graduation minus 1, LYGm1 (2018-19)	Latest Year of Graduation minus 2 LYGm2 (2017-18)
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable	140.00	133.00	126.00
Y Number of students who have graduated in the stipulated period	132.00	123.00	121.00
Success Index [SI = Y / X]	0.94	0.92	0.96

Average SI[(SI1 + SI2 + SI3) / 3]: 0.94

Assessment [5 * Average SI] : 4.70

Note : If 100% students clear without any backlog then also total marks scored will be 20 as both 4.2.1 & 4.2.2 will be applicable simultaneously.

4.3 Academic Performance in Second Year (10)

In

Academic Performance	CAYm1 (2022-23)	CAYm2 (2021-22)	CAYm3 (2020-21)
Mean of CGPA or mean percentage of all successful students(X)	8.14	7.62	7.44
Total number of successful students (Y)	135.00	120.00	136.00
Total number of students appeared in the examination (Z)	138.00	124.00	140.00
API [X * (Y/Z)]	7.96	7.37	7.23

Average API [(AP1 + AP2 + AP3)/3] : 7.52

Assessment [AverageAPI] : 7.52

4.4 Placement, Higher Studies and Entrepreneurship (30)

Inst

Item	CAYm1(2022-23)	CAYm2(2021-22)	CAYm3(2020-21)
Total No of Final Year Students(N)	132.00	123.00	121.00
No of students placed in the companies or goverment sector(X)	116.00	88.00	75.00
No of students admitted to higher studies with valid qualifying scores(GATE or equivalent State or National Level tests, GRE, GMAT etc.) (Y)	14.00	16.00	28.00
No of students turned enterpreneur in engineering/technology (Z)	2.00	0.00	0.00
Placement Index [(X+Y+Z)/N] :	1.00	0.85	0.85

Average Placement [(P1 + P2 + P3)/3] : 0.90

Assessment [30 * Average Placement] : 27.00

Program Name : Electrical Engg.
Assessment Year : 2022-23 (CAYm1)

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	Brajesh Kumar Patra	1902050124	ASICZEN TECHNOLOGIES	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
2	Anshuman Satpathy	1904050010	ASICZEN TECHNOLOGIES	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
3	Bhabana Dash	1902050008	Capgemini SE	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
4	Bhagyashree Sahoo	1902050045	Capgemini SE	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
5	Smitaranee Sahu	1902050057	Capgemini SE	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
6	DEBASHISH BEHERA	1902050068	Capgemini SE	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
7	Debasish Lenka	1902050019	CAPGEMINI SENIOR SOFTWARE ENGG.(7.5)	offrer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
8	Sandeep Singh	1902050046	CAPGEMINI SENIOR SOFTWARE ENGG.(7.5)	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
9	Sushree Subhashree Behera	1902050030	Capgeminin SE	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
10	ANUBHAV SETHI	1902050043	Capgeminin SE	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
11	Swati Kumari	1904050017	Capgeminin SE	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
12	Deepankar Nanda	1902020012	DCM SHRIRAM	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
13	Kuldeep Patro	1902050002	DCM SHRIRAM	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
14	Amit Kumar	1902050012	DCM SHRIRAM	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
15	Amrityam Kar	1902050007	DELOITTE	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
16	Subhankar Das	1902050013	DELOITTE	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
17	Vibha Pandey	1902050051	DELOITTE	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
18	Akankshya Pradhan	1902050118	DELOITTE	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
19	Gopal Krishna Panda	1904050004	DELOITTE	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
20	Nirmal krushna panda	1904050007	DELOITTE	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
21	Pratham Kumar	1904050016	DELOITTE	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
22	Mansi Takaria	1902050011	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
23	ANKITA BHANJA	2003050005	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
24	SAMBHAV SHARMA	1904050012	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
25	GYANARANJAN SAMAL	1904050003	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
26	Madhushree Palit	1902111056	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
27	Hitaish kumar	1902050125	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
28	Sonalika Nayak	1902050115	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
29	Uttam Kumar Panda	1902050090	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link

30	Anwesha Masanta	1902050062	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
31	Sidhartha suman Tripathy	1902050058	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
32	SAMIKSHA TRIPATHY	1902050054	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
33	Abinash Behera	1902050047	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
34	Sameer Kumar Pradhan	1902050044	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
35	Satya Swaroop Panigrahi	1902050028	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
36	BAIBHAB MOHAPATRA	1902050024	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
37	Priyanka Jena	1902050021	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
38	Amitabh Pradhan	1902050016	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
39	SUMIT KUMAR GIRI	1902050060	L&T	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
40	Sibasish Behera	1902050067	L&T	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
41	Abhishek Baishnab Charan Dash	1902050085	L&T	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
42	Ashirbada Mishra	1902050094	L&T	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
43	Madhusmita Behera	1902050120	L&T	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
44	Satya Swarup Nayak	1902050127	L&T	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
45	Samikhya Das	1902050128	L&T	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
46	Ritulagna Tripathy	1902050022	GLOBAL HITACHI	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
47	Abhips raj sahoo	1902050026	GLOBAL HITACHI	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
48	Rimsy Swain	1902050033	GLOBAL HITACHI	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
49	RITIK ROHAN DASH	1902050082	AQUAGREEN	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
50	GOURAV KUMAR SAHOO	1902050042	AQUAGREEN	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
51	BANSHIDHAR BARPANDA	1902050038	IBM codeknack	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
52	AJIT KUMAR BEHERA	1902050052	RELIANCE JIO MOBILITY	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
53	Shuvashish Naik	1902050096	RELIANCE JIO MOBILITY	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
54	Abhisek Nayak	1902050098	RELIANCE JIO MOBILITY	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
55	Baishnab Parida	1902050101	RELIANCE JIO MOBILITY	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
56	Abhilash Singh	1902050005	MARUTI SUZUKI	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
57	SUBHRAJIT PRADHAN	1902070047	MARUTI SUZUKI	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
58	PRITIRANJAN BISWAL	1902050027	ADITYA BIRLA	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
59	AMRUTANSU SAMAL	1902050056	ADITYA BIRLA	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link

60	Pratikranjan Dehury	1902050071	ADITYA BIRLA	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
61	SAMBIT KUMAR PRADHAN	1902050072	ADITYA BIRLA	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
62	Subhasri Satabdi Palo	1902050074	ADITYA BIRLA	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
63	Nabajyoti Mohapatra	1902050121	ADITYA BIRLA	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
64	Ashish Pradhan	1902050017	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
65	UMAKANTA ROUT	1902050080	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
66	Swadhin Kumar sahu	1904050009	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
67	Suraj Pal	1902050070	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
68	SUMAN KUMAR PADHAN	1902050088	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
69	SUJIT KUMAR DASH	1902100055	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
70	Subham Acharya	1902050109	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
71	SNEHANJAN BEHERA	1904050014	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
72	SMRUTI YOGAMAYA SAMANTARAY	1902050114	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
73	SHREYA MOHANTY	1904050018	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
74	Sanket Kumar Das	1902050110	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
75	Sanjeeb sah	1904050020	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
76	Samuel Mallik	1902050117	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
77	Saijyoti Mohapatra	1902050108	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
78	RUDRA PRATAP JENA	1902050104	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
79	Rohan Kumar Ratha	1902050123	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
80	Ritamraman Nayak	1902050075	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
81	Rajeshwari Das	1904050015	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
82	Rajendra Prasad Mohapatra	1902050084	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
83	Rajat Sahu	1902050089	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
84	PRASHANTI GARNAIK	1902050107	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
85	PRADYUMNA SAHA	2003050010	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
86	Neeladri Kumar	1902050035	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
87	Naresh sahoo	1902050126	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
88	NARAHARI NAIK	2003050004	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
89	GANESWAR SAHOO	2003050008	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link

90	Ashis Dang	2003050007	Shri Mahavir Alloys	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
91	Ahwan Pradhan	1902050029	TATA AUTOCOMP	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
92	Adya Rath	1902050036	TATA AUTOCOMP	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
93	Kirtik Samal	1902050049	SAPOORJI PALLONJI	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
94	CHINMAYA CHIRANJIB NAYAK	1902050081	JSW	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
95	Nihar Ranjan Naik	1902050113	ADANI	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
96	Bikash Kumar Senapati	1902050103	ADANI	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
97	SUBHANKAR SAHU	1902050053	ADANI	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
98	Siddhant Patel	1902050065	ADANI	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
99	MOTI RANJAN BIDHAR	1902050066	ADANI	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
100	Asmita Meher	1902050014	ADANI	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
101	Abhyudaya Dash	1902050025	HCL	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
102	Ankita Mishra	1902050129	TCS(NINJA)	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
103	Ashis Kumar Pattanaik	1902050095	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
104	GAURAV ROY	1902050009	GenC	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
105	Devendra Verma	1902050041	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
106	Jitendra Prasad Muduli	1902050050	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
107	Abhinandan puhan	1902050063	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
108	Animesh Senapati	1902050064	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
109	Kapilesh Bhoi	1902050092	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
110	DATTATREYA PRASAD KHADANGA	1902050102	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
111	Basudev Raiguru	1902050111	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
112	DEBEEDASA SAMAL	1902050116	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
113	Amlan Keshary	1902050122	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
114	Barsha Rani Pradhan	1902050130	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
115	Dibyajyoti Maharana	1904050008	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link
116	DEEPAK PRAKASH BEHERA	2003050003	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1Mo_ZJ-wZulQZkSGk8GlDwEsRCHlUiv9g?usp=drive_link

Assessment Year : 2021-22 (CAYm2)

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	Bhoomika Mangal	1802050040	DCM SHRIRAM	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
2	Aditya Pattnaik	1802050070	DCM SHRIRAM	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
3	Ritik R Mohapatra	1802050006	DELOITTE	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
4	Sandipta Sundar Sahu	1802050048	DELOITTE	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
5	Snigdha Barik	1802050050	DELOITTE	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
6	Sounmay Mishra	1802050054	DELOITTE	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
7	Sili Sahoo	1802050086	GenC (DN)	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
8	Harekrishna Pradhan	1802050011	GenC Elevate (DN)	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
9	Asrumochan Parida	1802050061	GenC Elevate (DN)	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
10	Srikant Kumar Maharana	1802050007	INCTURE	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
11	Naiyar Imam	1802050066	INCTURE	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
12	Rudra Narayan kansari	1802020009	TATA STEEL BSL PPO	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
13	Siddharth Prasad Panigrahi	1802050071	TATA STEEL BSL PPO	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
14	Ayushi Swain	1802050087	Deepak Fertilizers	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
15	Omkar Agarwal	1802050016	Deepak Fertilizers	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
16	Arpit Jain	1802050013	IBM	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
17	Yogeswar Mishra	1802050032	IBM	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
18	SANTOSH KESHARI SAHOO	1802050051	IBM	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
19	Abhishek Sahu	1702050007	IBM	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
20	Debasis Behuria	1802030064	GenC Elevate - Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
21	Akash Mishra	1903050007	GenC Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
22	Pratik Ray	1802050017	GenC Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
23	Balabhadra chand	1802050058	KREETI	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
24	Sweta Das	1802050078	KREETI	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
25	Adarsh Tripathy	1802050005	GenC Elevate Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
26	Anuvab Ray	1802050104	GenC Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
27	Deepika Das	1802050021	GenC Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
28	Ananda Kumar Pradhan	1802050107	GenC Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
29	DEEPAK KUMAR LENKA	1802050083	GenC Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link

30	Asit Kumar Sabat	1802050052	GenC Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
31	Sidharth Sankar Behera	1802050063	GenC Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
32	Jaya Prakash Sahoo	1802050022	GenC Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
33	Suswapna Panda	1802050036	GenC Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
34	Sagar Kumar Kar	1802050114	GenC Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
35	Bibhu Satapathy	1802050035	GenC Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
36	Sumit Kumar Bosemallick	1802050043	GenC Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
37	VENKAT RAMAN PRADHAN	1802050042	GenC Select	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
38	Puja Patra	1802050097	WIPRO	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
39	JYOTI PRAKASH BEHERA	1802050122	WIPRO	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
40	Bikash Barik	1802050023	WIPRO	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
41	Subhasis Khuntia	1802050053	WIPRO	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
42	Nitish Kumar Dash	1802050018	WIPRO	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
43	Chelisha Patnaik	1802050093	Marquee semiconductor	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
44	Sandeep Kumar Panda	1802050126	Marquee semiconductor	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
45	Sneha Mishra	1802050029	Marquee semiconductor	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
46	Rajesh Kumar Panda	1802050044	INFOSYS	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
47	Surya Prakash Kar	1802050069	INFOSYS	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
48	Aniket Raul	1802050088	INFOSYS	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
49	Saiprem Jena	1802050067	L&T	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
50	Soumya Mohapatra	1802050049	WIPRO	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
51	Sourav kumar kar	1802050119	INFOSYS	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
52	Ansuman mishra	1802050002	ISERVEU	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
53	Krutideepa Behera	1802050027	ISERVEU	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
54	Abhisek Choudhury	1802050059	ISERVEU	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
55	Manashi Das	1802050115	ISERVEU	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
56	Sai Shankar Sahoo	1802050060	LTTS	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
57	Prachee Acharya	1802050074	LTTS	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
58	Abhishek Ranjan Padhi	1802050089	L&T	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
59	Balram Tiwari	1802050075	WINDMOLLER	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link

60	Ritika kar	1802030060	ADITYABIRLA GROUP	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
61	Suparna Biswal	1802050076	ADITYABIRLA GROUP	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
62	Smrutilipsa Patel	1802050056	ISERVEU	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
63	MANORANJAN BHUE	1903050008	ISERVEU	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
64	Mimansha Pradhan	1802030063	ARCELOR MITTAL	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
65	Anshuman Barick	1802050047	ARCELOR MITTAL	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
66	Dhiraj Kumar Nayak	1802050096	ARCELOR MITTAL	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
67	Subham Kumar patra	1903050001	ARCELOR MITTAL	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
68	PARITOSH MISHRA	1802050079	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
69	Khirod Chandra Prusty	1802050125	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
70	Balaram sahu	1903050002	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
71	Nilamadhab kar	1903050012	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
72	Krishnashrita Dash	1802050020	JSW	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
73	DIBYAJYOTI SWAIN	1802050081	JSW	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
74	Ajaya Kumar Sahoo	1802110024	JSW	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
75	Sandeep Kumar Singh	1802050123	Principal Global Services	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
76	Partha Sarathy Nanda	1802050062	ADANI GROUP	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
77	Gajendra Puthal	1802050080	PRADAN	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
78	Nilu Ekka	1802050099	A1 FENCE PRODUCT	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
79	Kanhu Padhiali	1903050004	SHYAM METALLICS	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
80	Jiban kumar prusty	1804050005	JK PAPER	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
81	SURYAKANTA BEHERA	1802050090	TATA ELXSI	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
82	Archana Sahukar	1804050007	TATA ELXSI	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
83	Sushreeta Pradhan	1802050019	SKOLAR	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
84	Samir Bag	1804050018	SKOLAR	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
85	SUBHADRA BARLA	1802050112	Computacenter India Private limited	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
86	Mohit Punyamaya Mohanty	1802020030	JSL	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
87	Sandeep Kumar Sahu	1802030055	JSL	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link
88	Alok Ranjan Behera	1802050092	SHRIMAHAVIR ALLOYS	offer letter is given on email https://drive.google.com/drive/folders/1NteGxjSpddS6Y194ORoWPYTyeuH3Yvf6?usp=drive_link

Assessment Year : 2020-21 (CAYm3)

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	Balgopal Purohit	1702050025	ACCENTURE	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
2	Bligens mishra	1702070036	ACCENTURE	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
3	Som Nath	1702050095	ACCENTURE	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
4	Rashmi Ranjan Mahalik	1702050066	BYJUS	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
5	Abhijit Tripathy	1702050002	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
6	Anurag Tripathy	1702050016	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
7	Ashasmita Nayak	1702050017	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
8	Binikesh Mohanty	1702050027	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
9	Deepak Kumar Sahoo	1702050028	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
10	LOPAMUDRA GOUDA	1702050043	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
11	Manoj kumar pradhan	1702050046	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
12	Pritam Pranit Patro	1702050058	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
13	PRIYADARSHINI SAHOO	1702050060	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
14	Priyanka Raut	1702050061	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
15	Rohit Mohanty	1702050067	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
16	Satyajeet Das	1702050083	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
17	Snehal Nanda	1702050091	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
18	Soniya Thakur	1702050098	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
19	Sourav Panda	1702050101	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
20	Suraj agrawal	1702050109	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
21	Swaroop Kumar Sethi	1702050112	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
22	Utkarsha Badpanda	1702050117	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
23	Yogesh Nanda	1702050120	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
24	Balaji Prasad Behera	1702070031	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
25	Raj kumar Barik	1702100041	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
26	SRUTHI V	1702100053	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
27	V SPANDANA	1702050118	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
28	Gyana Ranjan Sahoo	1702050034	COGNIZANT	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
29	Pratik Samal	1702050055	DELOITTE	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link

30	Mohit Jha	1702050123	DELOITTE	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
31	Sonali Dash	1702050096	DELOITTE	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
32	Pratyasha Deo	1702050056	DXC TECH	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
33	Abinash Mishra	1702050008	INFOSYS	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
34	Pratik Panda	1702050054	INFOSYS	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
35	Sameer Sahaya	1702050073	INFOSYS	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
36	SARTHAK MOHAPATRA	1702050078	INFOSYS	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
37	SUBHAM KUMAR	1702050106	INFOSYS	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
38	Brundaban Biswal	1803050025	INFOSYS	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
39	Swastik Swaroop Dora	1602050117	INFOSYS	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
40	Raj Kishore Patnaik	1702030054	INFOSYS	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
41	Gajendra Kumar Rana	1803050007	INFOSYS	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
42	Biswa Bijayee Patra	1702050122	TATASTEEL BSL	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
43	Prakhar sharma	1702050124	TATASTEEL BSL	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
44	ATMACHETAN MISHRA	1702050022	TCS	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
45	bikramaditya panda	1702050026	TCS	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
46	Amit Kumar Nayak	1803050024	ACCENTURE	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
47	Goutam Puhan	1702050033	ACCENTURE	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
48	Sourav Rout	1702050102	JSW	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
49	Yash Agrawal	1702050126	JSW	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
50	Sushree Payal Sahoo	1702050111	JSW	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
51	Tarini Prasad das	1702050115	COGNIZANT (SAP)	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
52	Rutumber Nath	1702050068	WIPRO	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
53	Akash Ranjan Sahu	1702050012	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
54	Sankalp Agrawal	1702050076	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
55	Sonali Nayak	1702050097	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
56	Surya Narayan Sarangi	1702050110	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
57	Sobhan kumar Mishra	1702050093	TATA POWER	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
58	Simran Bidhar	1702050088	INFOSYS (SAP)	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
59	Anisha Rout	1702050014	Intelibim	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link

60	Soumyashree Gouda	1702050100	JSPL	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
61	Soham Hota	1702050094	JSPL	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
62	SIBANANDA BISWAL	1702050087	JSPL	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
63	Rohini Priya Pradhan	1803050015	JSPL	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
64	S Rohit Kumar	1702050069	VEDANTA	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
65	Monalisha Patro	1702050047	VEDANTA	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
66	Plaban Mohapatra	1702050050	VEDANTA	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
67	Surapati Bindhani	1702050125	VEDANTA	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
68	ANKITA TIRKEY	1702050015	VEDANTA	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
69	Manas Ranjan Mahanta	1702050044	VEDANTA	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
70	HITESH KUMAR SAHU	1702050036	VEDANTA	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
71	Jyoti Prakash Behera	1702050037	VEDANTA	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
72	Siva Prasad Behera	1702050090	FRONTROW	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
73	Jiban kumar paul	1803050002	SLM METAL	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
74	Satya Ranjan Ray	1803050022	SKOLAR	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link
75	Dipak kumar sahoo	1803050023	SKOLAR	offer letter is given on email https://drive.google.com/drive/folders/1S4lpwJ1j_nztoAHyvBbAS_jwdULISwHE?usp=drive_link

4.5 Professional Activities (20)

4.5.1 Professional societies/chapters and organizing engineering events (5) In

- The department of Electrical Engineering has a professional society called “Electrical Engineering Society.” Every year, an annual technical Symposium “RESONANCE” is organized by this society. In this event, there are research paper presentation by B.TECH & M.TECH students. The abstracts of the presented papers are available in the form a hard-copy souvenir book. Apart from this paper presentation event, other technical events are also organized like technical quiz competition, model presentation, coding competitions, hackathon etc.
- Invited and guest talk sessions by various distinguished academicians, personnel from industries and research centres are also organised by the technical society. List of such sessions that are organized in last three years are as follows.

SL. No.	Resource Person	Date and time	Topic
1	Prof. Chetan Singh Solanki	10.06.2022, 3.00-5.00 PM	Energy Climate change and I
2	Dr. Sukumar Mishra, Professor, IIT, Delhi	03.02.2023, 4.00-6.00 PM	Renewable Integrated EV Charger and its Cyber Security Threat
3	Resource person from OPAL-RT	05-10-2023-06-10-2023	Demonstration Programme of Real Time Digital Simulator (OPAL-RT)

- To encourage students to pursue research and innovation in space technology a MOU is signed with Indian Space Research Organisation (ISRO) and a research centre named as Veer Surendra Sai Space Innovation Centre (VSSSIC) is formed. Some of the selected students of Electrical Engineering department are working in this centre. These students are participating in various space related events and competitions and bringing laurels for the department. Dr. Raseswari Pradhan and Dr. R. K. Samal are among the faculties who are working as the faculty advisors in this centre.
- One IEEE student chapter is also available since 2019. Various technical events are organised regularly under this. Dr. Papia Ray is one of the coordinators in it. Dr. Raseswari Pradhan, sr. member of IEEE is also involved in its various events. One such event is prelim round of IEEE YESIST12.
- The department also organizing STTP, FDP, seminars time to time through out the year. The list of such programs that are held in last three years are enlisted as follows.

FDP Conducted by EE Department

Year	Name of the workshop/ seminar	Date From
2023	Real Time Simulator OPAL RT demonstration	5 Oct
2023	International Conference SIGMAA 2023	15 Dec 2023
2023	4th Electric Power and Renewable Energy Conference EPREC-2023	25 May 2023
2022	E&ICT Academy, NIT Warangal Sponsored by Ministry of Electronics and Information Technology (MeitY), GoI sponsored Application of Artificial Intelligence in Engineering	8th August 2022
2022	Technical Report Writing and Presentation using LaTeX (TRWP-2022)	08-Apr-2022
2020	Advances in Control System and Applications	8th Sept 2020
2020	Advancement of Optimisation Techniques in Electrical Engineering Applications	14th Sept 2020
2020	Protection and Control techniques for Micro-Grid & its Challenges (PCMG-2020)	15th Sep 2020
2020	Robust and Nonlinear System Dynamics and Control (RNSDC)	12th Dec 2020
2024	YESIST12	24th Feb, 202

4.4.2 Publication of technical magazines, newsletters, etc. (5) In

- Each year one **souvenir** book is published. This book enlisted the data of the pass out students. In addition to it, it consists of updated data of information regarding the department.
- **RESONANCE Souvenir**: This **souvenir** book is published every year. It consists of abstracts of the presented papers in the technical fest.

4.4.3 Participation in inter-institute events by students of the program of study (10) Inst

- All students of the Electrical Engineering program of study are participating in different Inter-institute events like SAMAVESH, VASSAUNT, TEDEX, Innovation Mela, etc. These events are organised every year.
- Some more events were also organized in the institute where the students of the Electrical Engineering program of study are actively participating as follows.

    1. Coding competitions sponsored by
    2. Competitions on the eve of Veer Surendra Sai & Netaji Subas Chandra Bose Jayanti
    3. Nua Odisha Navin Odisha Program (Integrated Youth Development Program)
    4. Sports events VRIDDHI held in NIT Rourkela
    5. Seminar on “National Education Policy 2023”
    6. Interactive session with Prof. Kiran Seth founder of “Society of Promotion of Indian Classical Music Culture Amongst Youth (SPICMACAY)”

- Students of the Electrical Engineering program also are involved in various technical and nontechnical societies, present in the institute like

    1. Technical society: Idea Cell, Robotics, Innovation cell, VSSSIC, etc.
    2. Sports society: Illumina, YOGA club
    3. Cultural Society: VIBRANZ club, Souls club, EMOTICA club, ART, and Photography club, etc.
    4. Literary Society
    5. NSS
    6. NCC
    7. SSG Society: Sanskar Kendra, Awareness program, blood donation camp, plantation drive, Fit India mission, Swachh India mission etc.’

- Students participated in various events individually or in group

2023-24			
Sl. No.	Event Name	Group/Individual Name	Awards
1	Ethos-2023(IIM Sambalpur)-Badminton	Megha Barik	First
2	Azadi ka Amrit Mohastov Rangoli competition	Prajna Priyadarshinee Sahoo	First
3	World Space Week 2023, Satish Dhawan Space Centre SHAR, ISRO, Sriharikota	Debabrata Sahoo	3rd
4	World Space Week 2023	Swagat Sekhar Panda	3rd
5	Rongoli Competition	Swayamsidhha Singh	2nd
6	Build-a- thon hackathon	Ritesh Patra	1st
7.	GDSC SUSTAINABLE HACKATHON	Rajiv Mishra	1st
8.	IEEE day quiz	Divyesh Darshan Sahoo	2nd
9.	ResCon 2024	Rudra Narayan Subudhhi	Runner’s up
10.	TCS YOUNG PROFFESSIONAL	Pramit Routray	Participation
11.	Bengaluru Tech Summit, 2023	Devi Prasad Pani	Delegate
12,	Illumina inter house table tennis	Ayush Mohapatra	Runner’s up
14.	General knowledge By NSS ON The occasion of Azadi ka Amrit Mahostav Krantiteertha	Odisha Mishra	2nd
15.	SMART INDIA HACKATHON, 2023	Smruti Srabani Mishra	Grand finalist
16.	Ethos(IIM Sambalpur)- Badminton	Saswat Bal	Winner

2022-23			
Sl. No.	Event Name	Group/Individual Name	Awards
1.	Pre IDSSC	Abhisek Pradhan	Recommendation Certificate
2.	Startup Yatra 2.0 by Startup Odisha	Rahul Krishna nanda	1st
3	Energized Entrepreneurs - E-CELL, VSSUT	Rahul Krishna Nanda	1st
4	Think Tank by Idea Club	Rajiv Mishra	1st
5.	Big Shot-VSSUT(Associated with StockGro)	Tanisha Das	5th
6.	Tata Power-TPSODL Safety Week Slogan Writing Competition	Pritish Acharya	1st
7.	Model Exhibition	Rudra Narayan Subudhhi	3rd
8.	Your gandhi:Inter college quiz competition	Baibhaba Kumar Panda	3rd
9.	Machine Learning Engineer	Hitesh Kumar Padhi	Participation

10.	IEEE PES Day 2023	Devi Prasad Pani	Ambassador to Kolkata section
11.	Azure Ai skills	Hitesh Kumar Padhi	Participation
12.	Barclays LifeSkills Programme	Hitesh Padhi	Participation
13.	AWS Academy Graduate - AWS Academy Cloud Foundations	Pramit Routray	Participation
14.	Kalinga Quest: Under-21 Odisha Based Quiz Competition	Aryansh Ray	2nd

2021-22			
Sl. No.	Event Name	Group/Individual Name	Awards
1.	Abhyudaya - BITS MESRA and Jharkhand Small Industries Association (JSIA)	Rahul Krishna Nanda	1st
2.	World Space week	Rudra Narayan Subudhhi	2nd
3.	Smart India Hackathon	Kuldeep Jena	Grand Finalist
4.	Workshop on Latex Writing	Debashish Kar	Participation Certificate
5.	Latex Writing Workshop	Sushree Suchismita Mohanty	Participation Certificate
6.	Latex Workshop	Ankita Panda	Participation Certificate
7.	ICSI National Constitution Quiz-2022	Pritish Acharya	3rd
8.	CodeKaze	Pradip Bej	AIR 2000
9.	Latex Workshop	Aditi Jalan	Participation
10.	Workshop on latex writing	Baibhaba Kumar Panda	Participation
11.	Workshop on latex writing	Debi Prasad Sahoo	Participation
12,	Latex Workshop-VSSUT, Burla	Pritish Acharya	Participation
13.	Latex Workshop-VSSUT, Burla	Priyanka Choudhry	Participation
14	MATH WORK MATLAB	Pramit Routray	Completion
15.	Workshop On Latex Writing	Rakesh Kumar Sahoo	Participation
16.	Latex Workshop	Devi Prasad Pani	Participation
17.	Latex Workshop	Devi Prasad Sharma	Participation
18.	Latex	Megha Barik	Participation

2020-21			
Sl. No.	Event Name	Group/Individual Name	Awards
1	Shiv Nadar University Business Simulation Challenge	Ratan Tripathy	1st
2.	Coding Ninjas Java and DSA Training	Pradip Bej	Completion Certificate
3.	Hacker rank Assessment	Pradip Bej	Completion Certificate
4.	JAVA Development Program	Pradip Bej	Completion Certificate
5.	Kalinga Quest-Quiz Competition	Pritish Acharya	3rd(Trophy + Certificate)
6.	Digital Marketing course from Google digital unlocked	Pramit Routray	Completion Certificate
7.	Google Analytics for Beginners	Pramit Routray	Completion Certificate
8.	Illumina inter house table tennis	Ayush Nayak	2nd

5 FACULTY INFORMATION AND CONTRIBUTIONS (200) Total

Sr. No	Name	PAN No.	University Degree	Date of Receiving Degree	Area of Specialization	Research Paper Publications	Ph.D Guidance	Faculty receiving Ph.D during the assessment year	Current Designation	Date (Designated as Prof / Assoc. Prof.)	Initial Date of Joining	Associa Type
1	Dr Bibhuti Bhusan Pati	ABOPP0126F	ME/M. Tech and PhD	04/10/2000	Control System Engineering	30	13	0	Professor	11/07/2002	11/07/2002	Regular
2	Dr Prakash Kumar Hota	AAHPH9870L	ME/M. Tech and PhD	02/02/2000	Power System Engineering	30	14	3	Professor	12/01/2006	05/09/1987	Regular
3	Dr Sidhartha Panda	AIMPP1473A	ME/M. Tech and PhD	07/03/2008	Power System Engineering	86	13	3	Professor	30/09/2011	30/09/2011	Regular
4	Dr Manish Tripathy	ADDPT3456H	ME/M. Tech and PhD	07/09/2009	Power System Engineering	10	6	0	Associate Professor	16/05/2015	16/01/2006	Regular
5	Dr Banaja Mohanty	AIVPM6780G	ME/M. Tech and PhD	06/05/2015	Power System Engineering	22	7	2	Associate Professor	10/10/2016	26/01/2006	Regular
6	Dr Siba Prasad Panigrahi	AQAPP6299G	ME/M. Tech and PhD	10/06/2009	Energy Management, Signal processing				Associate Professor	06/10/2016	06/10/2016	Regular
7	Dr Papia Ray	AFNPR0103H	ME/M. Tech and PhD	09/11/2013	Power System Engineering	72	8	4	Associate Professor	04/09/2017	18/07/2014	Regular
8	Mr Basanta Kumar Rana	AGOPR8034R	M.E/M.Tech	28/09/1991	Real Time Hardware and Software	0	0	0	Assistant Professor		30/01/2006	Regular
9	Dr Bidyadhar Rout	AGEPR5722J	ME/M. Tech and PhD	13/06/2019	Control system Engineering	24	2	0	Assistant Professor		12/10/2010	Regular
10	Mrs Mamun Mishra	AQSPM7628Q	M.E/M.Tech	15/06/2010	Power System Engineering	5	0	0	Assistant Professor		04/08/2011	Regular
11	Dr Deepak Kumar Lal	AFTPL1776Q	ME/M. Tech and PhD	04/12/2018	Power System Engineering	17	2	0	Assistant Professor		08/08/2011	Regular
12	Dr Ramesh Chandra Prusty	AWNPP5681K	ME/M. Tech and PhD	26/09/2015	Power System Engineering	56	5	2	Assistant Professor		10/08/2011	Regular
13	Dr Raseswari Pradhan	BWUPP6149L	ME/M. Tech and PhD	08/03/2014	Control system Engineering	26	5	2	Assistant Professor		09/06/2014	Regular
14	Dr Rajat Kanti Samal	BCKPS8230B	ME/M. Tech and PhD	14/11/2019	Power System Engineering	18	3	0	Assistant Professor		12/06/2014	Regular
15	Dr Debidasi Mohanty	BGJPM1225P	ME/M. Tech and PhD	21/10/2022	Power System Engineering	11	1	0	Assistant Professor		16/06/2014	Regular
16	Dr Nutan Saha	BKJPS1863B	ME/M. Tech and PhD	24/03/2021	Power Electronics and Drives	24	2	0	Assistant Professor		02/06/2014	Regular
17	Dr Rosy Pradhan	AZVPP7158C	ME/M. Tech and PhD	09/02/2019	Control and Automation	13	4	0	Assistant Professor		28/05/2014	Regular
18	Dr Bineeta Soreng	CUVPS4674K	ME/M. Tech and PhD	13/11/2023	Power System Engineering	4	0	0	Assistant Professor		29/05/2014	Regular
19	Dr Prangya Mohanty	AWSPM0147J	ME/M. Tech and PhD	26/10/2022	Power Electronics and Drives	6	0	0	Assistant Professor		21/05/2015	Regular
20	Mr Amit Mallick	CUXPM1208F	M.E/M.Tech	20/06/2015	Power System Engineering	3	0	0	Assistant Professor		21/10/2016	Regular

21	Mr Pratyusha Pratik	CIDPP3029D	M.E/M.Tech	15/06/2015	System and Control	2	0	0	Assistant Professor		07/11/2016	Regular
22	Dr Sagarika Rout	BFZPR7027H	ME/M. Tech and PhD	15/05/2023	Power System Engineering	5	0	0	Assistant Professor		06/10/2016	Regular
23	Mr K Sujit Kumar Achary	BIVPA1095B	M.E/M.Tech	31/05/2016	Power System Engineering	2	0	0	Assistant Professor		07/09/2017	Regular
24	Mrs Bisaya Bhoi	BKRPB0288B	M.E/M.Tech	04/07/2014	Power System Engineering	2	0	0	Assistant Professor		09/10/2017	Regular
25	Dr Jatin Kumar Pradhan	AXOPP9228N	ME/M. Tech and PhD	19/07/2019	Control system Engineering	8	1	0	Assistant Professor		22/12/2016	Regular

5.1 Student-Faculty Ratio (SFR) (20)

UG

No. of UG Programs in the Department 1

B.Tech Electrical Engineering						
Year of Study	**CAY**		**CAYm1**		**CAYm2**	
	(2023-24)		**(2022-23)**		**(2021-22)**	
	Sanction Intake	**Actual admitted through lateral entry students**	**Sanction Intake**	**Actual admitted through lateral entry students**	**Sanction Intake**	**Actual admitted through lateral entry students**
2nd Year	120	11	120	12	120	12
3rd Year	120	12	120	12	120	12
4th Year	120	12	120	12	120	12
Sub-Total	**360**	**35**	**360**	**36**	**360**	**36**
Total	**395**		**396**		**396**	
Grand Total	395		396		396	

PG

No. of PG Programs in the Department 3

M.Tech Control and Instrumentation			
Year of Study	**CAY(2023-24)**	**CAYm1(2022-23)**	**CAYm2 (2021-22)**
	Sanction Intake	**Sanction Intake**	**Sanction Intake**
1st Year	18	18	18
2nd Year	18	18	18
Total	**36**	**36**	**36**

M.Tech Power Electronics and Control Drives			
Year of Study	**CAY(2023-24)**	**CAYm1(2022-23)**	**CAYm2 (2021-22)**
	Sanction Intake	**Sanction Intake**	**Sanction Intake**
1st Year	18	18	18
2nd Year	18	18	18
Total	**36**	**36**	**36**

M.Tech Power System			
Year of Study	**CAY(2023-24)**	**CAYm1(2022-23)**	**CAYm2 (2021-22)**
	Sanction Intake	**Sanction Intake**	**Sanction Intake**
1st Year	18	18	18
2nd Year	18	18	18
Total	**36**	**36**	**36**
Grand Total	108	108	108

SFR

No. of UG Programs in the Department 1

No. of PG Programs in the Department 3

Description	**CAY(2023-24)**	**CAYm1 (2022-23)**	**CAYm2 (2021-22)**
Total No. of Students in the Department(S)	503 **Sum total of all (UG+PG) students**	504 **Sum total of all (UG+PG) students**	504 **Sum total of all (UG+PG) students**
No. of Faculty in the Department(F)	23 **F1**	25 **F2**	25 **F3**
Student Faculty Ratio(SFR)	21.87 **SFR1=S1/F1**	20.16 **SFR2=S2/F2**	20.16 **SFR3=S3/F3**
Average SFR	20.73 **SFR=(SFR1+SFR2+SFR3)/3**		
F=Total Number of Faculty Members in the Department (excluding first year faculty)			

Note: All the faculty whether regular or contractual (except Part-Time), will be considered. The contractual faculty (doing away with the terminology of visiting/adjunct faculty, whatsoever) who have taught for 2 consecutive semesters in the corresponding academic year on full time basis shall be considered for the purpose of calculation in the Faculty Student Ratio. However, following will be ensured in case of contractual faculty:
1. Shall have the AICTE prescribed qualifications and experience.
2. Shall be appointed on full time basis and worked for consecutive two semesters during the particular academic year under consideration.
3. Should have gone through an appropriate process of selection and the records of the same shall be made available to the visiting team during NBA visit

5.1.1. Provide the information about the regular and contractual faculty as per the format mentioned below:

	Total number of regular faculty in the department	Total number of contractual faculty in the department
CAY(2023-24)	23	0
CAYm1(2022-23)	25	0
CAYm2(2021-22)	25	0

Average SFR for three assessment years : 20.73

Assessment SFR : 14

5.2 Faculty Cadre Proportion (20)

Inst

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY(2023-24)	2.00	2.00	5.00	4.00	16.00	17.00
CAYm1(2022-23)	2.00	3.00	5.00	4.00	16.00	18.00
CAYm2(2021-22)	2.00	3.00	5.00	4.00	16.00	18.00
Average Numbers	2.00	2.67	5.00	4.00	16.00	17.67

Cadre Ratio Marks [(AF1 / RF1) + [(AF2 / RF2) * 0.6] + [(AF3 / RF3) * 0.4]] * 10 : 20.00

5.3 Faculty Qualification (20)

Inst

	X	Y	F	FQ = 2 x [(10X + 4Y) / F)]
2023-24(CAY)	17	6	25.00	15.52
2022-23(CAYm1)	17	8	25.00	16.16
2021-22(CAYm2)	15	10	25.00	15.20

Average Assessment : 15.63

5.4 Faculty Retention (10)

Inst

Description	2022-23 (CAYm1)	2023-24 (CAY)
No of Faculty Retained	25	23
Total No of Faculty	25	25
% of Faculty Retained	100	92

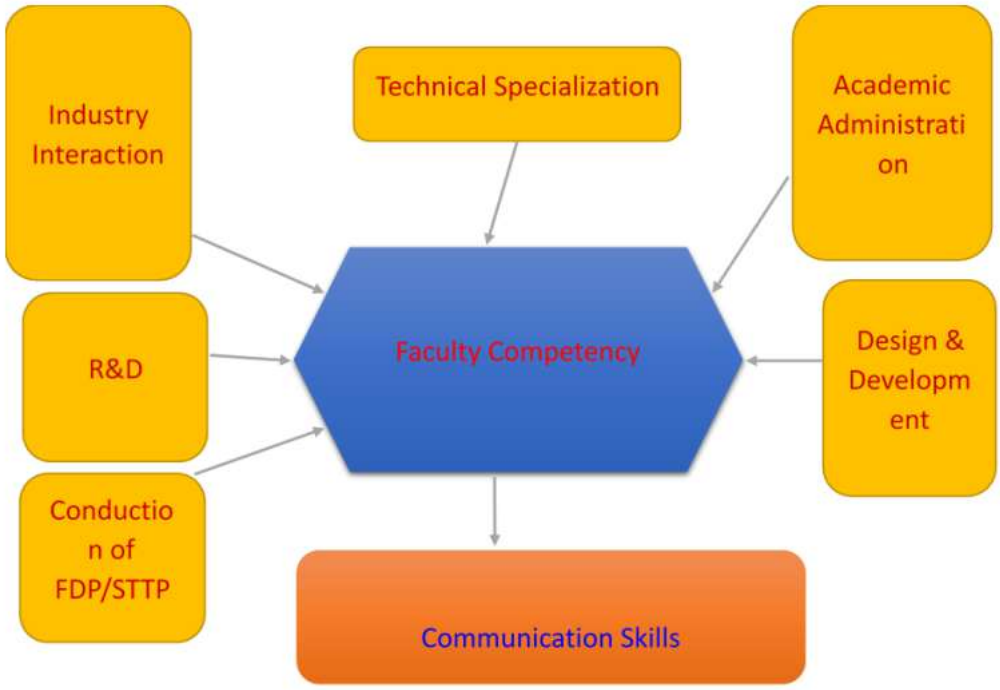
Average : 96.00

Assessment Marks : 10.00

5.5 Faculty competencies in correlation to Program Specific Criteria (10)

Inst

Program Specific criteria for the Department of Electrical Engineering specify excellence in the usage of technical knowledge for the domains like power systems, power electronics, control & instrumentation, renewable energy etc. It also mentions the application of mathematical, computational and software skills for analysis and design of electrical systems. To provide an overview of faculty competencies in correlation to program specific criteria, enhancement of faculty competency in key domains of teaching, assessment, research and professional development and industry-academia interaction have been considered. Figure 1 shows faculty competence chart:



A. Academic Competencies

1. Technical Specializations and Domain Expertise:

Faculty members in Department of Electrical Engineering are developed professional expertise and competencies in the various domains of teaching-learning, research, professional development, career guidance, and academic administration with leadership qualities. This is based on specialization in subject matter, professional experience during with this Institute and/ or prior as well. This is attributed to their interests, assignments they undertook during their academic experience.

Our Electrical Engg Dept comprises of 23 Faculties. We have 05 Programmes running in our Dept which are:

1. B.Tech (Electrical Engineering)
2. M.Tech(Specialization: Power System Engineering)
3. M.Tech (Specialization: Power Electronics & Control)
4. M.Tech (Specialization: Control & Instrumentation)
5. Ph.D

All the faculties specialization are at par with the programmes offered by our Dept. The faculty details are given below:

Sl. No.	Name	Designation	Highest Qualification	Specializations
1	Dr. B.B. Pati	Professor	PhD (Utkal Univ.)	Control System & High Voltage Engg.
2	Dr. S. Panda	Professor	PhD (IIT Roorkee)	Power System Engineering, Soft Computing Applications to Power System Problems
3	Dr. M. Tripathy	Asso. Professor	PhD (IIT Delhi)	Power System Engineering
4	Dr B. Mohanty	Asso. Professor	PhD (VSSUT, Burla)	Power System Engineering
5	Dr. S. P. Panigrahi	Asso. Professor	PhD (Berhampur Univ)	Power System Engineering
6	Dr. P. Ray	Asso. Professor & Head	Ph.D. (IIT Delhi)	Power System Protection
7	Mr. B.K. Rana	Asst. Professor	Integrated M.E (IISC Bangalore)	Real Time Hardware and Software
8	Dr. B.D. Rout	Asst. Professor	Ph.D (VSSUT, Burla)	Control System
9	Dr. D.K. Lal	Asst. Professor	Ph.D (VSSUT, Burla)	Power Systems

10	Dr. R.C. Prusty	Asst. Professor	Ph.D (VSSUT, Burla)	Power Systems
11	Dr. Raseswari Pradhan	Asst. Professor	Ph.D (NIT Rourkela)	Control Systems Engg.
12	Dr. Rosy Pradhan	Asst. Professor	Ph.D (VSSUT, Burla)	Control System
13	Mrs. M. Mishra	Asst. Professor	M. Tech. (Pursuing Ph.D.) (VSSUT, Burla)	Power System
14	Dr. R. K. Samal	Asst. Professor	Ph.D (VSSUT, Burla)	Power Systems
15	Dr. D. Mohanty	Asst. Professor	Ph.D. (VSSUT, Burla)	Power Systems
16	Dr. N. Saha	Asst. Professor	Ph.D (VSSUT, Burla)	Power Electronics
17	Dr. B. Soreng	Asst. Professor	Ph.D (VSSUT, Burla)	Control System
18	Dr. P.Mohanty	Asst. Professor	Ph.D. (VSSUT, Burla)	Power Control and Drives
19	Mr. Amit Mallick	Asst. Professor	M. Tech. (VSSUT, Burla)	Power System
20	Mr. P. Pratik (on QIP Ph.D Programme)	Asst. Professor	M.Tech (IIT Roorkee)	Power Electronics
21	Dr. S. Rout	Asst. Professor	M.Tech(Pursuing Ph.D.) (VSSUT, Burla)	Power System
22	Mr. K. S. K. Achary (on QIP Ph.D Programme)	Asst. Professor	M. Tech (NIT,Trichy)	Power System
23	Mrs. B. Bhoi	Asst. Professor	M. Tech (VSSUT, Burla)	Power System

Faculty members in above domain have contributed to curriculum development, course development, reviews and contributions through conferences/ seminars, expert lecture conduction, coordinated at departmental and higher levels like University. This is owing to rich experience in these fields. Approximately 85 % faculty members have teaching experience of above 10 years. Further, in our dept we have 04 academic group (control & automation, power system, signal processing and embedded systems, power electronics control & drives). Faculties with their specialization are placed in specific research groups who's responsibilities are to design new curriculum, revises the syllabus, conduct viva for the students of that specific specialization etc.

A. Curriculum/Course Development

Enrichment of course syllabus in accordance with the current trends in industry and research is carried out by all faculty members. This leads to inclusion of contemporary concepts in theory subjects and laboratories in order to achieve excellence in different fields of electrical engineering for understanding various applications. "Design, simulate, develop and analyse electrical components and systems using design engineering principles and MATLAB/PSCAD tool is one of program specific criteria which is achieved by faculty members working in Power system optimization domain. Representation of faculty members at National and University level bodies indicates their competency and technical expertise in respective fields. The Table 1 represents faculty competence

Table 1. Faculty competency: Representation of faculty members at State/University Level bodies

Representation of faculty members at State/University Level bodies

Sr . No	Faculty name	Representation at International/National/University Level

1	Dr. B.B.Pati	(i) Member, Board of Conducting Examiners for Electrical Engineering in Utkal University/Sambalpur University/Fakir Mohan Univ/North Odisha University from 1995 to till date (ii) Chancellor's Nominee for Faculty Selection in Sambalpur Univ/OUAT (iii) Head of Department from 18.8.2005 to 29.08.2007 in VSSUT, Burla, Odisha (iv) Head of Department from 31.7.1996 to 28.9.2000, T&P Deptt, IGIT, Sarang (v) Chairman, Board of Studies, UCE, Burla Elect. Dept from 18.8.2005 to 29.08.2007 (vi) Vice-Chancellor of VSSUT, Burla from 29.11.17-15.02.2018 and 14.02.2021-5.8.2021 (vii) Principal I/C (from time to time) of UCE (Now VSSUT), Burla (viii) Dean Faculty & Planning, VSSUT, Burla from 1.1.2010-01.02.2019 (ix) Dean, Planning & Coordination in UCE/VSSUT from 10.4.2007-31.12.2009 (x) Dean, PGS&R in VSSUT from July 2015- March 2016 (xi) Professor in charge, Academic Affairs (now Dean Academic Affairs) in VSSUT from 18.8.2003-18.10.2005 (xii) Member of Academic Council in VSSUT, Burla from Aug.2003-till date (xiii) Member of Board of Management in VSSUT, Burla from 8.2.2010-8.2.2013 & July 2014- July 2017 (xiv) Member of Board of Management in CV Raman Engg. College, Bhubaneswar from 2018-2020 (xv) Academic Committee member, Sambalpur University Institute of Information Technology (SUIIT), Sambalpur Univ	
2	Dr. S. Panda	(i)Administrative Responsibilities at VSSUT: Dean PGSR, Dean School of Electrical Sciences (ii) Head of Department of Electrical Engg of VSSUT, Burla (iii) TEQIP Coordinator in VSSUT, Burla (iv) Chairman of Estate Committee of VSSUT, Burla (v) Member of Academic Council in VSSUT, Burla (vi) Member of Board of Management in VSSUT, Burla	
3	Dr. Manish Tripathy	(i) Prof-in-Charge of Central Computers Facility(CCF),VSSUT,Burla (ii) Vice Chairman, Odisha Joint Entrance Examinations(OJEE) Committee (iii) Coordinator, office of T&P,VSSUT, Burla	
4	Dr. Banaja Mohanty	(i) Head of Department of Electrical Engg of VSSUT, Burla	

5	Dr. Papia Ray	(i) Head of Department of Humanities, VSSUT, Burla from 2014-2016 (ii) Head of Department of Electrical Engg of VSSUT, Burla (iii) Vice President of Literary Society, VSSUT, Burla from 2014-2015 (iv) Coordinator of Centre of Excellence, Renewable Energy (v) Member of Affiliation Committee, BPUT, Odisha (vi) Member of Conducting Board, VSSUT, Burla (vii) Member of Board of Studies, VSSUT, Burla (viii) Chairman of Departmental Research Committee, VSSUT, Burla (ix)Academic Council Member, VSSUT, Burla (x) Faculty In Charge of High Voltage Engineering Lab OF EE Dept, VSSUT, Burla (xi) Faculty Advisor of IEEE Student Branch, VSSUT, Burla
6	Dr. Ramesh Chandra Prusty	(i) Robotics vice president for the academy session 2014-15 (ii) Professor In Charge electrical maintenance for the period of 2013-15.
7	Dr. Deepak Kumar Lal	(i) Professor-in-charge (PIC) Electrical Maintenance from 1st August 2022 till date (ii) Member of Board of Studies (BOS) of the Department of Electrical Engineering from January 2022 to December 2024 (iii) Academic Council member, VSSUT, Burla, January – December, 2020 (iv) Faculty in-charge of Electrical Department Computer Lab from 10th January 2013 till date (v) Faculty advisor of Electrical Engineering Society from January 2015 to September 2016
8	Dr. Raseswari Pradhan	(i) Faculty Advisor & Committee member for Veer Surendra Sai Space Innovation Centre (VSSSIC) (ii) EE Department, VSSUT time-table coordinator (2018-2021) (iii) Faculty In charge of Control & Instrumentation Lab (2015-2021) (iv) Faculty In charge of Network Devices Lab (2021-Present)
9	Dr. R.K.Samal	(i)Coordinator, Electrical Maintenance, VSSUT, Burla (ii) Coordinator, Office of the Dean Academic Affairs, VSSUT, Burla (iii) International Student Advisor, VSSUT, Burla (iv) Coordinator, Office of the Dean, Faculty and Planning, VSSUT, Burla (v) Member, NIRF team, VSSUT, Burla (vi) Member, NAAC team, VSSUT, Burla (vii) Syllabus Coordinator during formation of 2019 syllabus of VSSUT, Burla (viii) OBE coordinator and formation of CO-PO computation excel for VSSUT, Burla (ix) Academic Coordinator of EE Dept of VSSUT, Burla (x) Faculty-in-charge of Power Electronics Lab of EE Dept, VSSUT, Burla (xi) Faculty-in-charge of Power Systems Lab, VSSUT, Burla
10	Dr. Debidasi Mohanty	(i) Time-table coordinator of EE Dept,VSSUT (ii) PG and PhD Admission Coordinator of EE Dept,VSSUT (iii) EE Department NAAC Faculty Co-ordinator (iv) Faculty In Charge of High Voltage Engineering Lab OF EE Dept, VSSUT, Burla

11	Dr. B.Soreng	(i) Time-table coordinator of EE Dept, VSSUT (ii) Faculty In charge of Network Devices Lab of EE Dept, VSSUT (iii) EE Department, VSSUT NAAC Faculty Co-ordinator	
12	Dr. Pragya Mohanty	(i) Examination co-ordinator of EE Dept,VSSUT,Burla (ii) Mtech co-ordinator of EE Dept, VSSUT, Burla (iii) Faculty In charge of Analog and digital lab of EE Dept, VSSUT, Burla	
13	Dr. B.D.Rout	(i) Professor In Charge, Electrical Maintenance, VSSUT, Burla (ii) Vice President, Students Technical Society,VSSUT,Burla (iii) Faculty In Charge of Control system Lab of EE Dept, VSSUT, Burla (iv) Faculty In charge of Electrical Machine Lab of EE Dept, VSSUT, Burla	

B. Student Guidance at UG and P.G Level

Faculty members are involved in guiding the students to carry out industry-oriented projects in Power System Engineering, Control & Instrumentation, Power Electronics, Renewable Energy, Electric Drives, Internet of Things etc for Agriculture and Industrial applications. Prototype creation in electrical applications has been done by student groups. A few of the students worked on emerging technologies of Electric Vehicle, Renewable Energy and cyber physical security for the same. Faculty and students are also well aligned with information technology through the execution of various industry based and agricultural projects. Faculty initiative to collaborate with eminent institutes like IIT Bhubaneswar, IIT Kharagpur etc and various Industry partners like Tata Motors, GRIDCO, POWER GRID etc has given an opportunity to students to explore and enhance their technical expertise on significant projects carried out in these institutions and Industries. Further in our university we have an entrepreneur development cell where the prototype developed by the students in the department labs are commercialized.

C. Faculty as Resource person

Faculty members have been involved in delivering expert lectures and guidance, and consultation related to academic and research matters in their domain for various university-affiliated colleges and other universities. Many faculty members of the EE department of VSSUT have acted as session chair/track chair/panel discussion member in various national and international conferences. In addition to technical sessions, lectures on the accreditation process, examinations, research and organization of events for students and professionals. Faculty advise industry during the interactions of Industry/research internships. Many of the faculty members of the department have acted as advisor to many industries and power sectors like HINDALCO,OHPC etc. Further, some of the faculties of the department are members of Odisha electricity regulatory commission.

2. **Faculty Development Programs(FDP) and Short-Term Training Programs(STTP)**

Short Term training Programs and Faculty Development Programs aim at a comprehensive understanding of subject matter and betterment of Teaching Leaning process. Faculty development program (FDP) has been considered as a stand-alone educational pedagogy in fostering knowledge and professional skills of faculty. Most of faculty members keep them updated always. They do complete and get certified for the knowledge and skills they acquire. Most of the courses are from different platforms from NPTEL and Swayam, Coursera etc. Table 2 shows the Faculty participation in various Faculty development/training activities/STTPs.

Table 2. Faculty participated in FDP/STTP/Training Programme

Faculty participated in FDP/STTP/Training Programme

Sl. No	Name of the Faculty	Academic Year	FDP/STTP/Training Program	Sponsored	Duration
1	Dr. B. B. Pati	2020 2020	1) 35th Indian Engineering Congress 2)Curriculum, Pedagogy and Evaluation for Higher Education	IET AICTE	3 Days 16 Days
2	Dr Manish Tripathy	2020 2020	1. Curriculum, Pedagogy and Evaluation for Higher Education 2. Digital Transformation in Teaching Learning Process.	AICTE	16 Weeks
3	Dr Banaja Mohanty	2020	Curriculum, Pedagogy and Evaluation for Higher Education	AICTE	16 Weeks

4	Dr. Papia Ray	2022 2020 2020	Strategies of Stress Free Healthy Life (SSFHL-2022) Advanced Microgrid, Operation and Control Engineering Ethics	Gender Advancement for Transforming Institutions (GATI), DST, India TEQIP-III of VSSUT, Burla, Odisha AICTE, New Delhi	7-11 Feb (5 Days) (5 days) 8 Sep-12 Sep 2020 (6 days) 21st-26th Nov 2020
5	Mr. Basanta Kumar Rana	2020	1. Advanced Microgrid Operation & Control AMGOC	TEQIP-III of VSSUT, Burla, Odisha	(5 days) 8 Sep-12 Sep 2020
6	Dr. Bidyadhar Rout	2019-2020 2020	Digital Transformation in Teaching Learning Process DC Micro grid and Control system.		2 Weeks 2 Weeks
7	Ms. Mamun Mishra	2020 2020 2021	Real-Time Hardware in the Loop Simulation of Power Electronics and Power System Electric Power Grid Modernisation: Trends, Challenges and Opportunities. Data-Driven Strategies in Smart Power System and Control		1 Week 1 Week 1 Week

8	Dr. Deepak Kumar Lal		Inculcating Universal Human Values in Technical Education		
			Strategies of Stress Free Healthy Life (SSFHL-2022)		
			Artificial Intelligence and Machine Learning (AI-ML).		
			Estimating and Costing of Non-conventional Energies.		1 Week
		2023			7-11 Feb (5 Days)
		2022	Management of Intellectual Property		
		2022	Uncertainty in Designing and		2 Week
		2022	Manufacturing for Electric Vehicle		1 Week
		2022	Systems.		1 Week
		2021	Electric Vehicle and Smart Grid: A Path Towards Sustainable Energy	Gender Advancement for Transforming Institutions (GATI), DST, India	1 Week
		2021	Nonlinear Systems: Dynamics and Control		1 Week
		2021			1 Week
		2021	Challenges and Opportunities in Integration of Electric		1 Week
		2020	Vehicles with Smart Electric Grids.		1 Week
		2020			1 Week
			Role of Power Electronics on Power Engineering		
			Green Technology & Sustainability Engineering		
			Power Electronics application in Machine Drives and Power system.		

9	Dr. Rasesw ari Pradhan	2020 2020 2020 2020	DC Micro grid and Control system AICTE SPONSORED SIX DAYS SHORT TERM TRAINING PROGRAMME UNDER AQIS SCHEME (ONLINE) ON Engineering Ethics (EE-2020) Robust and Nonlinear System Dynamics and Control (RNSDC 2020) Pedagogy Workshop on Building an Online Signals and Systems Course (Part - I)		1 Week 1 Week 2 Week 1 Week
10	Dr. Rajat Kanti Samal	2023 2023 2022-23 2022-23 2022-23 2021-22 2021-2022 2020-21 2020 2020 2020 2020	Artificial Intelligence: Search Methods for Problem Solving Deep Learning Introduction to Machine Learning Innovation, Business Models and Entrepreneurship. Managing Intellectual Property in Universities. Patent Law for Engineers and Scientists. Programming, Data Structures and Algorithms using Python. Patent Drafting for Beginners. Patent Search for Engineers and Lawyers Design of Photovoltaic Systems. Roadmap for patent creation. Non-Conventional Energy Resources. Digital Transformation in Teaching Learning Process.	NPTEL, AICTE NPTEL, AICTE NPTEL, AICTE NPTEL, AICTE NPTEL, AICTE NPTEL, AICTE NPTEL,AICTE NPTEL,AICTE NPTEL,AICTE NPTEL,AICTE NPTEL,AICTE NPTEL,AICTE NPTEL,AICTE	4 Months 4 Months 4 Months 4 Months 4 Months 4 Months 4 Months 4 Months 4 Months 4 Months 4 Months 4 Months

11	Dr. Debidasi Mohanty		Design, Modelling and Control of Renewable Energy Resources	AICTE	
		2020	Digital Transformation in Teaching Learning Process	NPTEL, AICTE	1 Week
		2020	DC Microgrid and Control System.	NPTEL, AICTE	2 Week
		2021	ICT Tools for Teaching, Learning Process and Institute	NPTEL,AICTE	8 Weeks
		2022	Non-Conventional Energy Resources.	NPTEL, AICTE	2 Weeks
		2022	Optimization Techniques: Theory, Practice and Emerging Applications.	NPTEL,AICTE	4 Months
		2023	Smartgrid-Basics to Advanced Technologies	NPTEL,AICTE	1 Week
		2023			4 Months
12	Dr. Rosy Pradhan		Industrial Training	OHPC	
		2021	One week Short term Training Programme through ICT mode on Theory, operation and experimentation on Sensor, transducer and actuator.	NPTEL, AICTE	15 Days
		2020	Robotics and Automation	NPTEL,AICTE	1 Week
		2020	Digital Transformation in Teaching Learning Process.	NPTEL,AICTE	2 Weeks
		2020	Artificial Intelligence	NPTEL,AICTE	2 Weeks
		2022	Digital System and Programmable Logic Control	NPTEL,AICTE	1 Week
			FDP on Pedagogy	NPTEL,AICTE	1 Week

13	Dr. Bineeta Soreng		FDP on Real Time Hardware in the Loop (HIL) Simulation for Power Electronics & Power Systems.		
		2020	Electric Power Grid Modernisation: Trends, Challenges and Opportunities.		1 Week
		2020	STC on Issues and Challenges of Grid Connected		1 Week
		2022	Renewable energy sources.		1 Week
		2022	FDP on Pedagogy		1 Week
		2023	STC and FDP on Sustainable		
		2023	Technologies & Management of Hybrid Microgrid.		8 Week
			Power System Protection And Switchgear		
14	Dr. Prangya Mohanty		Engineering Next Generation Technology For Humanity.		1 Week
		2020	Robust and Nonlinear System		
		2020	Dynamics and		2 Week
		2021	Control.		15 Days
		2022	Overview of Telecommunication Network.		2 Weeks
		2022	Applications of Artificial Intelligence in Engineering.	BSNL, Bbsr	1 Weeks
		2023	Pedagogy.		3 Days
			Inculcating Universal Human Values in Technical Education		

15	Dr. Sagarika Rout		Application of artificial intelligence in engineering		
			Data Science for ALL	NPTEL,AICTE	2 Weeks
		2022	Technical Report Writing and Presentation using LaTeX	NPTEL,AICTE	2 Weeks
		2022	Renewable Energies and Plug-In Vehicles Integration in Microgrid (REPVIM-2021)	Dept of EE,VSSUT	3 Days
		2021	Industrial Training	NPTEL,VSSUT	1 Week
		2021	Electrical Distribution System Analysis	OPTCL, Katapali	15 Days
		2021	Advanced Optimization Techniques and Hands-on with MATLAB/SCILAB	NPTEL,AICTE	8 Weeks
		2020	FDP on emerging trends in power electronics and power system	NPTEL,AICTE	2 Weeks
		2020	Renewable Power Generation, Control and Grid Integration	NPTEL,AICTE	1 Week
		2020	Advance microgrid operation and control	NPTEL,AICTE	1 Week
					2 Weeks
16	Mr. K Sujita Kumar Achary		Enhancement in Load ability of EHV Transmission System: Reduction in Line Losses		
			Power System Protection	NPTEL,AICTE	1 Week
		2020	Advanced Optimization Techniques and hands-on with MATLAB/SCILAB	NPTEL,AICTE	4 Months
		2020	Real Time Hardware in the Loop (HIL) Simulation for Power Electronics & Power Systems	NPTEL,AICTE	2 Weeks
		2020	Digital Transformation in Teaching Learning Process	NPTEL,AICTE	1 Week
		2020	Recent developments in smart grid technologies (NWSGT-2020)	NPTEL,AICTE	1 Weeks
					2 Weeks

17	Ms. Bisaya Bhoi		Applications of Machine Learning Techniques in Sustainable Technologies (AMLST-2024		
			Emerging Trends in Electrical Engineering		
			Sustainable Technologies & Energy Management of Hybrid Microgrid (STEMM-2023)	NPTEL,AICTE	
		2024		NPTEL,AICTE	1 Week
		2023	Management of Intellectual Property		2 Week
		2023	Uncertainty in Designing and manufacturing for Electric Vehicle Systems	NPTEL,AICTE	1 Week
		2022	Recent Advances in Transmission Insulators	NPTEL,AICTE	1 Week
		2022			8 Week
		2020	Advanced Optimization Techniques and hands-on with MATLAB/SCILAB	NPTEL,AICTE	2 Week
		2020		NPTEL,AICTE	1 Week
		2020	Engineering Next Generation Technology For Humanity	NPTEL,AICTE	2 Days
		2020	Advancement of Optimization Technique in Electrical Engineering Applications	NPTEL,AICTE	2 Days
		2020			1 Week
		2020		NPTEL,AICTE	1 Week
		2020	Advances in Control system & applications	NPTEL,AICTE	1 Week
		2020		NPTEL,AICTE	2 Days
			Electric Power Grid Modernisation: Trends, Challenges and Opportunities	NPTEL,AICTE	
			Impact of Covid on Power Sector (ICPS-2020)		
			Emerging Trends in Power Electronics and Power System		
			Recent Advances in Artificial Intelligence		

18	P. Pratik	2020 2022 2023	Digital transformation in teaching learning process Signal and image processing techniques for next generation Data analytics - Methods and application in healthcare	NPTEL, AICTE NPTEL,AICTE NPTEL,AICTE	2 Weeks 2 Weeks 2 Weeks

B. R and D Competencies

1. Publications:

Most of the Faculties in this department are publishing their research outcomes in high impact factor journals which is SCI/SCOPUS indexed in different domains. “Four Cs” of Teaching: Critical Thinking, Communication, Collaboration, and Creativity are the pillars of Teaching and Learning process. Faculty members have explored all the four C through publications in peer reviewed indexed journals. Some of the faculties of the department are enlisted among world’s top 2% scientist of Standford/Elsevier. Some of the selected publication for the last 5 years of the faculties are:

[1] Budumuru Ganesh Kumar, **Ray Papia**, “Power Quality Disturbance Detection using Histogram of Oriented Gradients with Extreme Learning Machine”, Accepted for publication in Electrical Engineering, In Press, 2024.

[2] Mishra Astamita, **Tripathy Manish**, **Ray Papia**, “A survey on different techniques for distribution network reconfiguration”, Journal of Engineering Research, In Press, 2023

[3] Babu Manish Ku and **Ray Papia**, “Sensitivity analysis, optimal design, cost and energy efficiency study of a hybrid forecast model using HOMER pro”, Journal of Engineering Research, vol.11, pp. 1-10,2023

[4] Chinta Durga Prasad, Monalisa Biswal and **Papia Ray**, “ Line Protection in Presence of High Penetration of Wind Energy: A Review on Possible Solutions”, Accepted for publication in Electrical Engineering, In Press, 2024.

[5] Sahoo A, **Hota P.K**., “Impact of renewable energy sources on modelling of bidding strategy in a competitive electricity market using improved whale optimization algorithm,” IET Renewable Power Generation, vol.15, no. 4, pp. 839-853,2020.

[6] Padhy S, Sahu P.R, **Panda S**, Padmanaban S, Guerrero JM, Khan B..“Marine predator algorithm based PD-(1+ PI) controller for frequency regulation in multi-microgrid system,” IET Renewable Power Generation, vol. 16, no. 10, pp. 2136- 2151, 2022

[7] A. Sahoo, P.K. Hota, “Impact of renewable energy sources on modelling of bidding strategy in a competitive electricity market using improved whale optimization algorithm”, IET Renewable Power Generation, vol.15, pp. 4, pp.839-853, 2021.

[8] **S. Panda**, J. K. Pradhan, Gyan Ranjan Biswal, B. Subudhi, and A. Mallick, “Development of prototype fractional order controller for a grid-tied photovoltaic system,” IEEE Transactions on Circuits and Systems: Express Briefs, vol. 69, No. 4, pp. 1-5, Apr. 2022.

[9] **P. Ray**, R.K. Lenka, and M. Biswal, “Frequency mode identification using modified masking signal-based empirical mode decomposition”, IET Generation, Transmission and Distribution, vol.13, no. 8, pp.1266-1276, 2019.

[10] B. Subudhi and **R. Pradhan**, “A new adaptive maximum power point controller for a photovoltaic system”, IEEE Transactions on Sustainable Energy, vol. 10, no.4, pp.1625-1632, 2019.

[11] B. Subudhi, **R. Pradhan**, Bacterial foraging optimization approach to parameter extraction of a photovoltaic module, IEEE Transactions on Sustainable Energy, vol. 9 no.1, pp. 381-389, 2018

[12] RK Khadanga, **S Panda**, “A modified local input signal for SSSC-based damping controller design,” Journal of Electric Power Components and Systems, vol. 49 , no. 11-12, pp. 978-989, 2022

[13] RK Khadanga, D Das, A Kumar, **S Panda**, “An improved parasitism predation algorithm for frequency regulation of a virtual inertia control based AC microgrid,” Journal of Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, vol. 44, no. 1, 1660–1677,2022

[14] RK Khadanga, SR Nayak, **S Panda**, D Das, BR Prusty, PR Sahu, “A Novel Optimal Robust Design Method for Frequency Regulation of Three-Area Hybrid Power System Utilizing Honey Badger Algorithm”, International Transactions on Electrical Energy Systems, 2022, Article ID 6017066

[15] S Mishra, PC Nayak, **RC Prusty**, **S Panda**, “Modified multiverse optimizer technique-based two degree of freedom fuzzy PID controller for frequency control of microgrid systems with hydrogen aqua electrolyzer fuel cell unit”, Journal of Neural Computing and Applications, vol. 34, no. 21,pp. 18805-18821, 2022

[16] UC Prusty, PC Nayak, **RC Prusty**, **S Panda**, “An improved moth swarm algorithm based fractional order type-2 fuzzy PID controller for frequency regulation of micro-grid system,” Journal of Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 1-23, 2022 (https://doi.org/10.1080/15567036.2022.2038735)

[17] RK Khadanga, A Kumar, **S Panda**, “A novel sine augmented scaled sine cosine algorithm for frequency control issues of a hybrid distributed two-area power system,” Journal of Neural Computing and Applications, 1-14, 2021

[18] PR Sahu, PK Hota, **S Panda**, RK Lenka, S Padmanaban, F Blaabjerg, Coordinated Design of FACTS Controller with PSS for Stability Enhancement Using a Novel Hybrid Whale Optimization Algorithm–Nelder Mead Approach, Journal of Electric Power Components and Systems, vol 49, no. 16-17, pp. 1363-1378, 2021

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2. Patents

Apart from publishing the work in refereed journals, faculty and students are also aware about protecting the ideas and prototypes. Faculty is collaborating with other Dept faculty, Industry and other institutes for the purpose. Significant leap is seen in the number of patents filed in India as well other countries like Australia. Most of these are published and granted by various patent authorities, indicating the competency of the concern faculty in the area. Some of the patents which are recently published by the faculties are given in Table 3.

Table 3. Patent Details of Faculties

S. No.	Title of the Patent	Faculty	Patent Number	Published Date
1	Se –wheelchair: smart electric wheelchair	Dr. B.B.Pati	201921005026	08.02.2019
2	M-charger: mobile charger using the energy of our steps	Dr. B.B.Pati	201921005025	19.07.2019
3	A System and Method for Scheduling task in IOT-FOG-CLOUD Continuum	Dr. Rosy Pradhan	2021100648	31 March 2021
4	Sustainable Green Renewable Energy for smart cities	Dr. Papia Ray	202241075974	30.12.2022

3. Contribution to research by organizing research events, Chairing sessions, review and support system

Research community interacts and share knowledge mostly during conferences and seminars, colloquium, and symposiums. Our faculty get involved and participate in these for dissemination of knowledge. Institute organizes conferences and seminars. Along with this, many faculty work as Committee members, session chairs and reviewers for the papers. Faculty review paper for the conferences and journals. This demonstrates their technical expertise in their domain. Incremental change in knowledge base of concern and expression abilities. The mentoring and motivation provided to the students has not only helped develop them ideas and ability to express, present technical know-how and innovations. This in turn help creating conducive environment for research and development. Table 4 depicts the outreach activities of the faculties

Table 4. Faculties outreach activities

S.No	Name of faculty	Session Chair/Coordinator	Duration	Department/Institute	Sponsoring Agency
1	Dr. Papia Ray	1. Session Chair in IEEE Energy Conversion Congress and Exposition –Asia (IEEE ECCE-Asia 2021)	24 May-27 May 2021	NUS, Singapore	IEEE
		2.1st International Conference on Smart Energy and advancement in Power Technologies ICSEAPT-21	6 Sep-8 Sep 2021	Dept of EE, NIT, Jamshedpur	Springer, NIT Jamshedpur
		3. 3rd Electric Power and Renewable Energy Conference EPREC-2022	27 May-29 May 2022	Dept of EE, NIT, Jamshedpur	Springer, NIT Jamshedpur
		4. 2nd Electric Power and Renewable Energy Conference EPREC-2021	28-30 May 2021	Dept of EE, NIT, Jamshedpur	Springer, NIT Jamshedpur
		5. 4th Electric Power and Renewable Energy Conference EPREC-2023	25-27 May 2023	Dept of EE, NIT, Jamshedpur	Springer, NIT Jamshedpur
		6. 2nd International Conference on Renewable Power	28-29 March 2023	Mewat Engg College, Haryana	Springer,Govt of Haryana
		7. 5th International Conference on Energy, Power and Environment (ICEPE 2023)”	15-17 June 2023	NIT Meghalaya	IEEE, NIT Meghalaya

a). National and International Awards / Fellowships: Many faculties have received award from international bodies for their research outputs which are listed below

1. **Dr. Papia Ray** received Best Paper Award in 2018 in International Conference on Signals, Machine and Automation (Springer Sponsored), 23-25 Feb 2018, New Delhi
2. **Dr. Papia Ray** received Best Paper Award in session and track in 2023 in 4th Electric Power and Renewable Energy Conference (EPREC) 2023.
3. **Dr. Papia Ray** received Best Paper Award in International Conference on Recent Advances in Electrical, Electronics & Digital Healthcare Technologies (REEDCON) 2023
4. **Dr. Debidasi Mohanty** received Tata Rao Award from Institution of Engineers, India.
5. **Dr. Rajat Kanti Samal** received NPTEL Star domain certification(patents & IPR) award from SWAYAM-NPTEL in 2023
6. **Dr. Rajat Kanti Samal** received star motivated learners award from SWAYAM-NPTEL in 2023
7. **Dr. Raseswari Pradhan** received Topper & Elite Gold certificate in “Automatic Control” from SWAYAM-NPTEL in 2023
8. **Mrs M.Mishra** received best paper award in IEEE International Symposium on Sustainable Energy, Signal Processing and Cyber Security (iSSSC) Conference in 2020

b) Professional Societies: Many faculties of the department are active members of the professional bodies and are actively participating in various activities conducted by the professional bodies.

1. **Dr. Papia Ray** is a Senior Member of IEEE (92907573), Life Member of ISTE (LM 92187) & Fellow of Institution of Engineer’s India (F-1270305).
2. **Dr. B.B. Pati** is Fellow of Institution of Engineer’s India, Member of Odisha Bigyan Academy and Odisha Engineering Congress, Life member of ISTE
3. **Dr. S.P.Panigrahi** is a Member of Institution of Engineer’s India
4. **Dr. S. Panda** is a Fellow of Institution of Engineer’s India
5. **Dr. Nutan Saha** is Member of Institution of Engineer’s India
6. **Dr. Raseswari Pradhan** is a Member of IEEE and Life Member of ISTE
7. **Dr. D.K.Lal** is a Member of Odisha Bigyan Academy and Life Member of ISTE, New Delhi
8. **Dr. Debidasi Mohanty** is a Life Member of ISTE.

4. Research Grant and Consultancies procured from external agencies: Many faculties of the department have been granted with various projects from external agencies like Department of Science & Technology (DST) New Delhi, DST Odisha, Odisha state higher education council (OURIIP) etc. Recently the department is awarded with Fund for Improvement of S&T Infrastructure in Universities (FIST) with an amount of 118 Lakhs for a period of 05 years. Presently the department has 164.09 Lakhs project fund ongoing. Some of the recent research grants of the department are given in Table 5.

Table 5. Research Grant of the Faculties and Department

Name of the Investigator	**Project No.**	**Funding Agency**	**Title of the project**	**Duration**	**Amount sanctioned**
Dr. Papia Ray & Faculties of EE Dept	TPN-90495	DST, New Delhi	Establishment of Advanced Renewable Energy Systems Laboratory (ARSEL)	Awarded: 2023 Duration: 5 Years	118 Lakhs
Dr. M. Tripathy and Dr. R. K. Samal	CRG/2022/003026	SERB-CRG, New Delhi	Development of a Composite index to evaluate the impact of renewable resource time series dynamics on Power systems	Awarded: 2023 Duration: 3 years	30.18 Lakhs
Dr. Nutan Saha	347/191/OSHEC	OURIIP, OSHEC, Odisha	Flexible Energy Control Scheme for Solar PV powered SRM Drive	Awarded: 2023 Duration: 2 years	5.93 Lakhs
Dr. Raseswari Pradhan	5279/ST	DST, Odisha	FPGA based Adaptive Power Quality Estimators for Smart Grid Applications	Awarded: 2022 Duration: 2 years	9.98 Lakhs

Dr. Papia Ray	YSS/2015/001584	DST, SERB, New Delhi	Assessment of wide area measurement signal by computational Intelligence Technique	Awarded:2016 Duration: 3.6 years (**completed in 2020**)	15.46 Lakhs

Revenues are generated from consultancy work given by external agencies by various faculties of the Department. Some of the consultancy works of the faculties are listed in Table 6.

Table 6. Consultancy Work by Faculties of the Department

S.No	Name of the consultancy project	Name of PI/Consultant	Consulting / Sponsoring Agency with contact detail	Year	Revenue generated (Amount Rupees)
1	Testing of transformer oil as per IS 1866-2000 and 335-1993 on dated:08-01-2021	Dr. P.Ray	Plant Manager M/S IOCL LPG bottling plant , Jharsuguda Ref. No.- JSG/LPG/PMCC DATED 02-12-2020	2021	4248
2	Testing of transformer oil as per IS 1866-2000 and 335-1993 on dated:04-02-2022	Dr. P.Ray	M/s Voith Hydro Private Limited, A-20&21, sector 59, Noida-201301. Ref. No.-VHN Site/UCE-0011 dated 24-12-2021	2022	2124
3	Testing of Mineral oil of power transformer of various capacity above 1MVA in MCL	Dr. P.Ray	MCL,Burla. Dated:18-05-22	2022	83544
4	Testing of Transformer oil for 02 nos of Transformers used at 2MWp solar power plant of MCL	Dr. P.Ray	MCL, Burla. Dated: 28.05.2022	2022	35636/-
5	Testing of transformer oil as per IS 1866-2000 and 335-1993 on dated:25-06-2022	Dr. P.Ray	MCL,Burla. Dated:24-06-22	2022	1534/-
6	High earth resistivity of the soil of the state institute of disaster management (SIDM) building at Gothapatna, Bhubaneswar on 9.8.2023 & 10.8.2023	Dr. P.Ray	Odisha State Disaster Management Authority, Bhubaneswar, Odisha	2023	5000/-

5. FDP/STTP/Conference Organized in the Department

The Department has organized various FDP/STTP Conferences in the department in the last few years. All the faculties of the department were actively involved in organizing the events and making it a successful one. Some of the FDP/STTP/Conference organized are enumerated in Table 7.

Table 7. FDP/STTP/Conference Organized by Faculties of the Department

Year	Name of the workshop/ seminar	Date	
		From	To
2023	Real Time Simulator OPAL RT demonstration	5 Oct	6 Oct
2023	International Conference SIGMAA 2023	15 Dec 2023	16 Dec 2023
2023	4th Electric Power and Renewable Energy Conference EPREC-2023	25 May 2023	27 May 2023
2022	E&ICT Academy, NIT Warangal Sponsored by Ministry of Electronics and Information Technology (MeitY), GoI sponsored Application of Artificial Intelligence in Engineering	8th August 2022	19th August 2022
2022	Technical Report Writing and Presentation using LaTeX (TRWP-2022)	08-Apr-2022	09-Apr-2022
2020	Advances in Control System and Applications	8th Sept 2020	9th Sept 2020
2020	Advancement of Optimisation Techniques in Electrical Engineering Applications	14th Sept 2020	15th Sept 2020

2020	Protection and Control techniques for Micro-Grid & its Challenges (PCMG-2020)	15th Sep 2020	16 Sep 2020
2020	Robust and Nonlinear System Dynamics and Control (RNSDC)	12th Dec 2020	23rd Dec 2020

Faculties are highly competent as regard to programme specific criteria. Some of the high impact factor and renowned journals in which faculties are publishing their research outcomes are given in Table 8.

Table 8. Publication of Faculties in Renowned Journals

Name of the Journal	No of Publications	Impact Factor of Journal
IEEE Transactions on sustainable energy	03	8.8
IEEE Transactions on Circuits and Systems	01	5.1
IEEE Transactions on Instrumentation and Measurement	01	5.6
IEEE Transactions on Control System Technology	01	4.8
IEEE Transactions on Power Systems	03	6.6
IEEE Transactions on Energy Conversion	01	4.9
IET Generation Transmission and Distribution	08	2.5
IET Renewable Power Generation	04	3.034
Artificial Intelligence Review	01	12
Journal of Renewable & Sustainable Energy	05	2.219
Electric Power Systems Research	10	3.9
International Journal of Electrical Power & Energy Systems	03	5.2
Electric Power Components and Systems	05	1.5
Energy Sources, Part A: Recovery, Utilization and Environmental Effect	14	2.9
Neural Computing and Applications	04	6.0
International Transactions on Electrical Energy Systems	10	2.639
Sustainable Energy, Grids and Networks	05	5.4

5.6 Innovations by the Faculty in Teaching and Learning (10)

Inst

Innovative teaching methodologies help faculty to deliver their lectures in a faster and efficient manner thereby allowing the students to keep abreast of technological advancements. In addition, innovative teaching aids also impart rationale thinking and self-sufficient thought process in the mindsets of students by making them more proactive. Few of the innovative teaching techniques adopted in the department are briefly tabulated below:

Table 5.6.1. Innovative methods used by the faculties in Teaching & Learning

S.No	Innovative Method	Mode of Teaching/Learning Process	Objective
1	Use of ICT in Classroom Teaching	Use of evota Digital Smart Board for teaching and learning	1. To explore collaborative areas to improve participation, productivity, and communication. 2. It provides correct information in a comprehensive manner with different examples. 3. It helps learners to broaden their information base. 4. It provides variety in the presentation of content, which helps learners to learn according to their own pace. 5. It helps in better understanding and long retention of information.
2	Multimedia Learning	Live Demonstration of Concepts, Mathematical models by various software tools	To enhance the overall comprehension of students and able to demonstrate them with the formulation of mathematical models of real-world problems
3	E-Learning	NPTEL/ COURSERA	To upgrade the quality of education by listening to renowned professors and their best practices and enrich the subject knowledge of the students
4	Preparing digital notes and uploading in departmental webpage of the University website	Digital Notes	To have a brief idea of the subject for the students
5	Tutorial Classes	One-to-One teaching, Presentation	To help the students in ways that makes students better to help themselves, work with students on typical problems, help students to improve their learning strategies
6	Giving Lesson plan to the students	Lesson Plan	To have an idea about the outline of the subject & Books for the subject
7	Preparing Course diary, Question papers with evaluation scheme	Course Diary, Question Paper with evaluation scheme	To have a record of the teaching material for further improvement, Evaluation schemes are prepared for the students to know the actual answer to a particular problem in the Question paper
8	Assignments and Projects	Analyse and Preparation	To improve the Cognitive skills
9	Industrial Visit	Demonstration by Industry person in the field	To enhance the subject knowledge and field knowledge
10	Updating the Syllabus and Lab Manuals according to the recent trends	Revised up to date syllabus	For upgradation of knowledge

11	Extra classes for the slow learners	Presentation, Chalk-board/Smart Board teaching	To improve the slow learner's knowledge about the subject
12	Arranging Seminars, Expert lectures	Experts from premium Institute of the Country or Outside the Country/ Industry persons from leading Industries	To explore particular subject with interaction with academia or industry experts. Expert session provide platform to students to express their ideas and view.
13	Taking Viva-Voce, Quiz Test, Progress seminars, of the students quarterly throughout the semester	In House faculties and Experts from other Institutes	To upgrade the knowledge of the students and they will know their loop holes and will improve in future
14	Gate coaching classes for the students	In House faculties and Experts from other Institutes	To help the students perform better in GATE exam for higher studies
15	Internship to the students/ Referring the students to different industries for internship	Field experience by visiting the industries	It can offer a beginner in a career field with practical experience, for better employability, for entrepreneurship

5.7 Faculty as participants in Faculty development/training activities/STTPs (15)

Name of the faculty	Max 5 Per Faculty		
	2022-23(CAYm1)	2021-22(CAYm2)	2020-21(CAYm3)
Dr. Bibhuti Bhusan Pati	0.00	0.00	5.00
Dr. Prakash Kumar Hota	0.00	0.00	0.00
Dr. Sidhartha Panda	0.00	0.00	0.00
Dr Manish Tripathy	0.00	0.00	5.00
Dr Banaja Mohanty	0.00	0.00	0.00
Dr Siba Prasad Panigrahi	0.00	0.00	0.00
Dr. Papia Ray	0.00	5.00	5.00
Mr. Basanta Kumar Rana	5.00	0.00	5.00
Dr. Bidyadhar Rout	0.00	0.00	5.00
Ms. Mamun Mishra	0.00	5.00	5.00
Dr. Deepak Kumar Lal	0.00	5.00	5.00
Dr. Ramesh Chandra Prusty	0.00	0.00	0.00
Dr. Raseswari Pradhan	0.00	5.00	5.00
Dr. Rajat Kanti Samal	0.00	0.00	5.00
Dr. Debidasi Mohanty	5.00	5.00	5.00
Dr. Nutan Saha	0.00	0.00	0.00
Dr. Rosy Pradhan	5.00	0.00	5.00
Dr. Bineeta Soreng	5.00	0.00	5.00
Dr. Prangya Mohanty	5.00	0.00	5.00
Mr. Amit Mallick	0.00	0.00	0.00
Mr. Pratyusha Pratik	5.00	5.00	5.00
Dr. Sagarika Rout	5.00	5.00	5.00
Mr. K Sujita Kumar Achary	0.00	0.00	5.00
Ms. Bisaya Bhoi	5.00	0.00	5.00
Sum	40.00	35.00	85.00
RF = Number of Faculty required to comply with 20:1 Student Faculty Ratioas per 5.1	25.00	25.00	25.00
Assessment [3*(Sum / 0.5RF)]	9.60	8.40	20.40

Average assessment over 3 years: 12.80

5.8 Research and Development (75)

5.8.1 Academic Research (20)

Inst

SL. NO.	YEAR	NO. peer Review Journal (SCI/SCIE/ESCI/Scopus)	No. of Conference	No. of Book Chapter
1	2019-20	57	54	12
2	2020-21	47	46	3
3	2021-22	58	35	20
4	2022-23	84	41	22
5	2023-24	30	14	7

(i) Number of quality publications in SCI Journals

[1] Budumuru Ganesh Kumar, **Ray Papia**, “Power Quality Disturbance Detection using Histogram of Oriented Gradients with Extreme Learning Machine”, Accepted for publication in Electrical Engineering, In Press, 2024.

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[3] Babu Manish Ku and **Ray Papia**, “Sensitivity analysis, optimal design, cost and energy efficiency study of a hybrid forecast model using HOMER pro”, Journal of Engineering Research, vol.11, pp. 1-10,2023

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(ii)Citations: some of the selected faculties citation is given below:

Table 5.8.1.1. some of the selected faculties citation

S. No.	Name of the Faculty	Designation	Highest Qualification	Citation(According to Google Scholar)
1	Dr. B.B. Pati	Professor	PhD (Utkal Univ.)	1326
2	Dr. S. Panda	Professor	PhD (IIT Roorkee)	12989
3	Dr. M. Tripathy	Asso. Professor	PhD (IIT Delhi)	2022
4	Dr B. Mohanty	Asso. Professor	PhD (VSSUT, Burla)	1778
5	Dr. P. Ray	Asso. Professor & Head	Ph.D. (IIT Delhi)	1128
6	Dr. B.D. Rout	Asst. Professor	Ph.D (VSSUT, Burla)	94
7	Dr. D.K. Lal	Asst. Professor	Ph.D (VSSUT, Burla)	745
8	Dr. R.C. Prusty	Asst. Professor	Ph.D (VSSUT, Burla)	1450
9	Dr. Raseswari Pradhan	Asst. Professor	Ph.D (NIT Rourkela)	2746
10	Dr. Rosy Pradhan	Asst. Professor	Ph.D (VSSUT, Burla)	391
11	Dr. R. K. Samal	Asst. Professor	Ph.D (VSSUT, Burla)	133
12	Dr. D. Mohanty	Asst. Professor	Ph.D. (VSSUT, Burla)	81
13	Dr. P.Mohanty	Asst. Professor	Ph.D. (VSSUT, Burla)	65

(iii) Edited Books Published

Table 5.8.1.2. Book Published by Faculties

S. No	Title of the Book	Editor's name	Publisher	Year of Publication
1	Microgrid Operation, Control, Monitoring and Protection	**Papia Ray** and Monalisa Biswal	Springer Nature Pub. ISSN:1876-1100,2020	2020
2	Next Generation Smart Grids: Modeling, Control and Optimization	Surender Reddy Salkuti and **Papia Ray**	Springer Nature Pub. ISBN:978-981-16-7794-6	2022
3	Power Quality in Microgrids: Issues, Challenges and Mitigation Techniques	Surender Reddy Salkuti, Arvind R.Singh, **Papia Ray**	Springer Nature Pub. ISBN:978-981-99-2065-5	2023

(iv) Book Chapters

Note: Bold denotes Faculty from the Department of EE, VSSUT.

Table 5.8.1.3. Book Chapter Published by Faculties

S. No	Title	Author's name	Publisher	Year of Publicatio
1	Offline power quality management and control using neural networks	**Papia Ray*,** Surender Reddy Salkuti, R Aditya Kumar	Springer Nature Singapore	2023
2	Introduction to Power Quality in Microgrids	Arvind R. Singh, **Papia Ray***, R. Seshu Kumar, and Surender Reddy Salkuti	Springer, Singapore	2023

3	Adaptive Filtering for Power Quality Features with Optimized PI Gains in Four Wires UPQC	Sabha Raj Arya, Sayed Javed Alam, Rajasekhara Reddy Chilipi, and **Papia Ray***	Springer, Singapore	2023
4	Development of a Smart Wind Monitoring System Using Arduino Technology	**Papia Ray***, Surender Reddy Salkuti, KR Satyajit, Abhilash Asit Kumar Majhi, Chinmay Singh	Springer, Singapore	2023
5	Short-Term Load Forecasting Using Jaya Algorithm	**Papia Ray*** and Surender Reddy Salkuti	Springer, Singapore	2023
6	Development of a Power Quality Analyzer Using Arduino Technology	**Papia Ray***, Nirlipta Parida, Suparna Biswal, Arvind R Singh	Springer, Singapore	2023
7	Cost and energy efficiency study of an ARIMA forecast model using HOMER pro	MK Babu, **Papia Ray***, AK Sahoo	Springer, Singapore	2023
8	An Intelligent Approach for Defect Detection of Bearing	**Papia Ray***, Arpana Singh, KR Satyajit	Springer, Singapore	2022
9	A Fuzzy-Based Approach for Short Term Load Forecasting	**Papia Ray***, KR Satyajit	Springer, Singapore	2022
10	Real-Time Power Quality Monitoring System in LabVIEW Using Wavelet Transform and Stockwell Transform	**Papia Ray***, Surender Reddy Salkuti, KR Satyajit	Springer, Singapore	2022
11	Convolutional Neural Network-Based Lung Cancer Detection	KR Satyajit, Sai Samarpita, **Papia Ray***	Springer, Singapore	2022
12	A Comprehensive Review of Active Islanding Detection Methods and Islanding Assessment in a Grid Connected Solar Based Microgrid	Kumari Namrata, Akshit Samadhiya, **Papia Ray***	Springer, Singapore	2022
13	Overview of Next Generation Smart Grids	Surender Reddy Salkuti, **Papia Ray***, Sravanthi Pagidipala	Springer, Singapore	2022

14	A Novel Approach for Power Quality Improvement in Microgrid	Arvind R Singh, **Papia Ray***, Surender Reddy Salkuti	Springer, Singapore	2022
15	Hybrid Artificial Intelligence Technique Based Fault Location in a Long Transmission Line	**Papia Ray***, Surender Reddy Salkuti	Springer, Singapore	2022
16	A Computational Intelligence Approach for Power Quality Monitoring	**Papia Ray*** and Monalisa Biswal	Springer, Singapore	2021
17	Introduction to condition monitoring of wide area monitoring system	**Papia Ray*** and Debani Prasad Mishra	Springer, Singapore	2020
18	Intelligent Relay Coordination Method for Microgrid	**Papia Ray***	Springer, Singapore	2020
19	Performance of Control Algorithms in Wind-based Distribiuted Generation System with Power Quality Features:A Review	Ashutosh K.Giri,Sabha Raj Arya,Rakesh Maurya and **Papia Ray***	Springer, Singapore	2020
20	A Study of Machine Learning Techniques in Short Term Load Forecasting Using ANN	Saroj Kumar Panda, **Papia Ray**, Debani Prasad Mishra	Springer, Singapore	2020
21	WOA Optimized 2DOF TIDF Controller for Automatic Generation Control of Hydro-Thermal System (https://scholar.google.com/citations?view_op=view_citation&hl=en&user=d7Iv_8wAAAAJ&cstart=20&pagesize=80&citation_for_view=d7Iv_8wAAAAJ:qUcmZB5y_30C)	Kumaraswamy Simhadri, BVS Acharyulu, **Banaja Mohanty**, K Suneel Goutham	Spinger	2021
22	Automatic generation control of multi-area multi-source deregulated power system using moth flame optimization algorithm (https://link.springer.com/chapter/10.1007/978-981-16-1089-9_56)	BVS Acharyulu, Tulasichandra Sekhar Gorripotu, Ahmad Taher Azar, **Banaja Mohanty**, Ramana Pilla, Sandeep Kumar, Fernando E Serrano, Nashwa Ahmad Kamal	Spinger	2021
23	Moth Flame Optimized Automatic Generation Control with PIDF Controller for the Integration of Plug-In Electrical Vehicles with Interconnected Power System (https://link.springer.com/chapter/10.1007/978-981-16-7076-3_21)	BVS Acharyulu, Kumaraswamy Simhadri, B Seshasai, **B Mohanty**	Springer	2021
24	Voltage control method of isolated wind power system (https://link.springer.com/chapter/10.1007/978-981-15-5262-5_26)	Gyana Ranjan Biswal, **Banaja Mohanty**	Springer	2020
25	Automatic Generation Control in Deregulated Power Market Using Sunflower Optimization Algorithm (https://link.springer.com/chapter/10.1007/978-981-15-2305-2_16)	Abhilipsa Sahoo, Prakash Kumar Hota, **B Mohanty**	Springer	2020

***: Corresponding Author**

(v) Ph.D. guided /Ph.D. awarded during the assessment period while working in the institute

Table 5.8.1.5. Ph.D Supervision Details

S.No	Name of the Ph.D Scholar	Name of the Degree awarding Institution/ University	Name of the Guide	Status	Year
1	Saroj Kumar Panda	VSSUT, Burla	Dr. Papia Ray	Awarded	2022
2	T.R.K.Rao Ballireddy	VSSUT, Burla	Dr. Papia Ray	Awarded	2022
3	Manish Kumar Babu	VSSUT, Burla	Dr. Papia Ray	Awarded	2023
4	V. S. Acharyulu Bhadram	VSSUT,Burla	Dr. P.K.Hota & Dr.B.Mohanty	Awarded	2020
5	Preeti Ranja Sahu	VSSUT,Burla	Dr. P.K.Hota & Dr.B.Mohanty	Awarded	2020
6	Debidasi Mohanty	VSSUT,Burla	Dr S. Panda	Awarded	2022
7	Bineeta Soreng	VSSUT,Burla	Dr R Pradhan	Awarded	2023

8	Swati Sucharita Pradhan	VSSUT,Burla	Dr R Pradhan	Awarded	2022
9	Bibhuti Prasad Sahoo	VSSUT,Burla	Dr S Panda	Awarded	2022
10	Ms Abhilipsa Sahoo	VSSUT,Burla	Dr P K Hota	Awarded	2022
11	Sonalika Mishra	VSSUT,Burla	Dr R C Prusty	Awarded	2022
12	Mrs Sasmita Padhy	VSSUT,Burla	Dr S Panda	Awarded	2022
13	Mr Dillip Khamari	VSSUT,Burla	Dr R K Sahu	Awarded	2022
14	Mr Pratap Chandra Nayak	VSSUT,Burla	Dr R C Prusty	Awarded	2022
15	Mrs Soudamini Behera	VSSUT,Burla	Dr Sasmita Behera	Awarded	2022
16	Mr Kumaraswamy Simhadri	VSSUT, Burla	Dr Banaja Mohanty	Awarded	2021
17	Prakash Chandra Sahoo	VSSUT,Burla	Dr. Ramesh Chandra Prusty	Awarded	2020
18	Debi Prasad Patra	VSSUT,Burla	Dr. B.B.Pati	Awarded	2023

5.8.2 Sponsored Research (20) Inst

2022-23 (CAYm1)

Project Title	Duration	Funding Agency	Amount(in Rupees)
Establishment of Advanced	5 years (2023-2029)	DST, New Delhi	11800000.00
			Total Amount(X): 11800000.00

2021-22 (CAYm2)

Project Title	Duration	Funding Agency	Amount(in Rupees)
Development of a Composit	3 Years	SERB-CRG, New Delhi	3018000.00
Flexible Energy Control Sch	2 Years	OURIIP, Govt. of Odisha	592000.00
FPGA based Adaptive Powe	2 years	DST, Odisha	998000.00
			Total Amount(Y): 4608000.00

2020-21 (CAYm3)

Project Title	Duration	Funding Agency	Amount(in Rupees)

Cumulative Amount(X + Y + Z) =

5.8.3 Development activities (15) Inst

1. Product Development: Many prototype from research outcomes of the students has been developed which is filed for patent and yet to be commercialized. Some of the patents which are published and yet to be granted and commercialized are:

Table 5.8.3.1. Patent Details

S. No.	Title of the Patent	Faculty	Patent Number
1	Se –wheelchair: smart electric wheelchair	Dr. B.B.Pati	201921005026
2	M-charger: mobile charger using the energy of our steps	Dr. B.B.Pati	201921005025
3	A System and Method for Scheduling task in IOT-FOG-CLOUD Continuum	Dr. Rosy Pradhan	2021100648
4	Sustainable Green Renewable Energy for smart cities	Dr. Papia Ray	202241075974

2. Research Laboratories:

(i) Recently the department is awarded with Fund for Improvement of S&T Infrastructure in Universities (FIST) with an amount of 118 Lakhs for a period of 05 years from Department of Science & Technology (DST), New Delhi to establish **"Advanced Renewable Energy Systems Laboratory".** The Department is on the verge of establishing the proposed Lab said above.

(ii) Time to time upgradation process is done in the different laboratories of the Department by purchasing new equipment's, introducing new experiments, maintenance of existing machines and devices etc. The Department which is established in 1956 has 10 laboratories, which are:

1.Electrical Machines Lab.
2. Power Electronics and Devices Lab.
3. Microcontroller and Drives Lab
4. Network & Devices Lab
5. Instrumentation and Control Lab.
6. High Voltage Lab.
7. Power System Lab.
8. Advanced Power System Lab.
9. Computation Lab
10. Embedded system/DSP/Soft computing Lab.

Some of the new equipment's purchased for the laboratories are:

Table 5.8.3.2. New Equipment procurred for the Dept. Lab

Name of the Equipment	Year of Procurement	Source of funding	Status
1) Force displacement, velocity, acceleration, vibration, torque and speed measurement trainers with NI Lab View License for virtual instrument; 2) Environmental and Humidity measurement trainers with NI Lab View License for virtual instrument	10/02/2020	TEQIP-III,VSSUT,Burla	Working
AC DC Microgrid	2020	TEQIP-III,VSSUT,Burla	Working

1. Force displacement, velocity, acceleration, vibration, torque and speed measurement trainers with NI Lab View License for virtual instrument; 2) Environmental and Humidity measurement trainers with NI Lab View License for virtual instrument

AC DC Microgrid

Wind Emulator

5.8.4 Consultancy (from Industry) (20)

2022-23 (CAYm1)

Project Title	Duration	Funding Agency	Amount(in Rupees)
Testing of trans	1	MCL,Burla	1534.00
High earth resi	1	Odisha State D	5000.00
			Total Amount(X): 6534.00

2021-22 (CAYm2)

Project Title	Duration	Funding Agency	Amount(in Rupees)
Testing of trans	1	M/s Voith Hydr	2124.00
Testing of Mine	1	MCL,Burla	83544.00
Testing of Tran	1	MCL,Burla	35636.00
			Total Amount(Y): 121304.00

2020-21 (CAYm3)

Project Title	Duration	Funding Agency	Amount(in Rupees)
Testing of transformer oil as	1	M/S IOCL LPG	4248.00
			Total Amount(Z): 4248.00

Cumulative Amount(X + Y + Z) = 132086.00

5.9 Faculty Performance Appraisal and Development System (FPADS) (10)

Inst

Every Year (Starting of the Semester) i.e in July, each faculty submit their performance appraisal form (PAR) to the head of the department. The head of the department verifies the score claimed by the faculty, puts the comments and HOD's score and forwards the application to the School Dean for further verification. A well-defined system for faculty appraisal for all the assessment years are available and it is well implemented. The different evaluation criteria and overall format of the PAR is:

Table 5.9.1. Faculty performance appraisal form

Evaluation Criteria	Maximum Marks	Self Assessment Score	Verified Score by Committee Members/HOD/Dean
Teaching - Process	25		
Students' Feedback	15		
Departmental Activities	20		
Institute Activity	10		
Academic Research Score	30		
Total Score	100		

It is implemented and the faculties obtaining low score are counselled by the HOD/Dean for improvement

Evaluation criteria for Performance Appraisal for faculties:

Teaching Process
(a) Class taken

(b) Scheme of evaluation

(c) Course outcome

Student feedback
Departmental activities
Institute activities
Academic research score
(a) Research publication

(b) Book published

(c) Research guidance

(d) Research Project/Consultancy

(e) Patents

(f) Invited lectures/Resource Person

Analysis of Performance appraisal and Evaluation of Faculties

The PAR submitted by faculty members are analyzed by the internal and external committee formed by Hon'ble Vice-Chancellor of our University.

5.10 Visiting/Adjunct/Emeritus Faculty etc. (10)

In

(i) Expert lecture by Prof. Sukumar Mishra, Professor, IIT Delhi in 3.2.2023
(ii) Expert lecture by Dr. Manohar Singh, Senior Engineer, CPRI in march 2023
(iii) Expert lecture by Sri A.K.Tripathy, Ex-Director General, CPRI in Dec 2020

6 FACILITIES AND TECHNICAL SUPPORT (80)

Tot

6.1 Adequate and well equipped laboratories, and technical manpower (40)

Inst

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	Basic Electrica	41	DC MOTOR, D	28 (EVEN)+28(	SANJIB JENA,	SENIOR INSTI	BTech, DIPLOI
2	Electrical Mach	42	DC MOTOR, D	8(odd)+16(eve	SANJIB JENA	SENIOR INSTI	BTech
3	POWER ELEC	42	SCR MODULE	8 (ODD)	DEEPAK KUM.	SENIOR INSTI	MTech
4	HIGH VOLTAG	12	100 KV AC SE	8 (ODD)	DEEPAK KUM.	SENIOR INSTI	MTech
5	ANALOG AND	42	CLASS A AMP	16 (EVEN)	SAMEER BEH	SENIOR INSTI	DIPLOMA
6	MICROPROCE	42	8085 ADVANC	8 (EVEN)	AMIT KUMAR	SENIOR INSTI	DIPLOMA
7	POWER SYST	30	IDMT OVER C	8(even)+8(odd	AMIT KUMAR	SENIOR INSTI	DIPLOMA
8	COMPUTATIO	42	34 i-7 COMPU	16 ()+	SHYAMAPADA	COMPUTER P	DIPLOMA
9	NETWORK TH	42	TRANSFORMI	8 (ODD)	SANJIB JENA	SENIOR INSTI	BTech
10	CONTROL LAI	42	LINEAR CONT	8 (ODD)	SANJIB JENA	SENIOR INSTI	BTech
11	INSTRUMENT.	42	RESITANCE T	8 (ODD)	SANJIB JENA	SENIOR INSTI	BTech

6.2 Laboratories maintenance and overall ambiance (10)

Inst

1. Laboratories are equipped with adequate hardware and licensed software to run program specific curriculum.
2. Any laboratories are equipped with instruments of its domain. Proper maintenance and servicing of these equipments are done on a regular basis.
3. All the consumable items are maintained in the sub-ledger of the corresponding laboratory.
4. Before the beginning of each semester, all the equipments are thoroughly checked and if any deficit of any of the kit is found then efforts are made to fix it.
5. For the smooth conduction of the experiments, adequate space and well ventilation is provided in the laboratories.
6. The consumable components of laboratory get worn out (or) get damaged. These items need to be purchased periodically as when need arises. If any equipment is the department tries to rectify it by our technical persons, If it couldnt be possible by them, then it is sent to Authorized Equipment Manufacturer (OEM) for repairing.
7. Annually each laboratories are monitored for their assets and a status report is prepared. Some components which are obsolete are disposed from time to time.

6.3 Safety measures in laboratories (10)

Sr. No	Laboratory Name	Safety Measures
1	BASIC ELECTRICAL ENGINEERING	1. Safety Instructions for students. 2. Students are asked to come to the laboratory with apron and safety shoes. 3. Electrical equipments are protected using MCBs 4. Fire Extinguishers are provided at relevant places. 5. Do's and Don'ts boards are installed at appropriate places in the laboratory.
2	ELECTRICAL MACHINE LABORATORY	1. Safety Instructions for students. 2. Students are asked to come to the laboratory with apron and safety shoes. 3. Electrical equipments are protected using MCBs 4. Fire Extinguishers are provided at relevant places. 5. Do's and Don'ts boards are installed at appropriate places in the laboratory.
3	POWER ELECTRONICS LABORATORY	1. Safety Instructions for students. 2. Electrical equipments are protected using MCBs 3. Fire Extinguishers are provided at relevant places.
4	HIGH VOLTAGE LABORATORY	1. Safety Instructions for students. 2. Students are asked to come to the laboratory with apron and safety shoes. 3. Electrical equipments are protected using MCBs 4. Fire Extinguishers are provided at relevant places. 5. Do's and Don'ts boards are installed at appropriate places in the laboratory. 6. Proper earthing has been maintained.
5	ANALOG AND DIGITAL CIRCUIT LABORATORY	1. Safety Instructions for students. 2. Electrical equipments are protected using MCBs 3. Fire Extinguishers are provided at relevant places.
6	MICROPROCESSOR AND MICROCONTROLLER LABORATORY	1. Safety Instructions for students. 2. Electrical equipments are protected using MCBs 3. Fire Extinguishers are provided at relevant places.
7	POWER SYSTEM LABORATORY	1. Safety Instructions for students. 2. Electrical equipments are protected using MCBs 3. Fire Extinguishers are provided at relevant places.
8	COMPUTATIONAL LABORATORY	1. Safety Instructions for students. 2. Electrical equipments are protected using MCBs 3. Fire Extinguishers are provided at relevant places.
9	NETWORK THEORY LABORATORY	1. Safety Instructions for students. 2. Electrical equipments are protected using MCBs 3. Fire Extinguishers are provided at relevant places.
10	CONTROL LAB	1. Safety Instructions for students. 2. Electrical equipments are protected using MCBs 3. Fire Extinguishers are provided at relevant places.
11	INSTRUMENTATION LABORATORY	1. Safety Instructions for students. 2. Electrical equipments are protected using MCBs 3. Fire Extinguishers are provided at relevant places.

6.4 Project laboratory (20)

Inst

	Real-time simulator (OP5700, HIL/RCP) used to run research model in real time
	AC-DC Microgrid
	3 KW Grid connected Solar Energy Conversion System

7 CONTINUOUS IMPROVEMENT (75)

Tot

7.1 Actions taken based on the results of evaluation of each of the COs, POs & PSOs (30)

Inst

POs Attainment Levels and Actions for Improvement- (2022-23)

POs	Target Level	Attainment Level	Observations
PO 1 : Engineering Knowledge			
PO 1	2.6	2.55	The attainment level is slightly lesser than the target level. The target level was not attained by BCH2101, BEE2303, BEE2305, BEE2403 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: More examples will be included involving applications of fundamentals. Action 2: Practical applications of engineering skills are to be incorporated in the next syllabus revision. Action 3: Focus to enhance student's skill. Action 4: More focus on discussions related to approaching a problem, using engineering knowledge for solving problem is included.			
PO 2 : Problem Analysis			
PO 2	2.6	2.57	The attainment level is slightly lesser than the target level. The target level was not attained by BCH2101, BEC2101, BCE2102, BCH2191, BEC2191, BCE2192, BEE2303, BEE2305 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Target Level can be increased. Action 2: The syllabus will be modified accordingly to have easy approach to problems. Action 3: More focus on discussions related to approaching a problem. Action 4: More examples will be included involving applications of fundamentals.			
PO 3 : Design/development of Solutions			
PO 3	2.6	2.135	The attainment level is lesser than the target level. The target level was not attained by BEE2303, BEE2305, BEE2403 and the action taken are for the above mentioned courses for which the target was not met.
Action1: The students are encouraged to participate in different technical clubs to develop their designing skills. Action2: Providing more practice of complex engineering problems. Action3: Organizing visits to industry to get familiar with engineering developments, problems and solutions.			
PO 4 : Conduct Investigations of Complex Problems			
PO 4	2.6	1.95	The attainment level is lesser than the target level. The target level was not attained by BEE2305, BEE2403 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Target Level can be increased. Action 2: The syllabus will be modified accordingly to have easy approach to problems.			
PO 5 : Modern Tool Usage			
PO 5	2.6	2.155	The attainment level is lesser than the target level. The target level was not attained by BEE2303, BEE2305 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Target Level can be increased. Action 2: The syllabus will be modified accordingly to have easy approach to problems.			
PO 6 : The Engineer and Society			
PO 6	2.6	2.2	The attainment level is lesser than the target level.
Action 1:Students are encouraged to participate in cultural activities. Action2: Students are motivated to join different activities on societal issues.			
PO 7 : Environment and Sustainability			
PO 7	2.6	1.94	The attainment level is lesser than the target level. The target level was not attained by BEE2303, BEE2305 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Importance given to lectures to create sustainable and green solutions. Action 2: More environmental issues related lectures to be included to make the students aware of the situation.			
PO 8 : Ethics			
PO 8	2.6	1.89	The attainment level is lesser than the target level. The target level was not attained by BEE2303, BEE2305, BCM2609 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Human Value courses are included. Action 2: Career guidance program and motivational talks are to be arranged to gain knowledge of professional ethics. Action 3: Students are motivated in between courses about importance of ethics in life.			
PO 9 : Individual and Team Work			
PO 9	2.6	2.51	The attainment level is slightly lesser than the target level. The target level was not attained by BEE2303, BEE2305 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: The students are encouraged to participate in team work to motivate them to have leadership skill. Action 2: Students are encouraged to work in real time problems applying the fundamentals knowledge.			
PO 10 : Communication			
PO 10	2.6	2.47	The attainment level is lesser than the target level. The target level was not attained by BEE2305, BEE2403 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Students are encouraged to participate through class presentations and give feedback to them for improvement in these areas. Action 2: Students were asked to write reports on certain engineering topics.			

PO 11 : Project Management and Finance

PO 11	2.6	2.01	The attainment level is lesser than the target level. The target level was not attained by BEE2303, BEE2305 and the action taken are for the above mentioned courses for which the target was not met.
Action1:Team works are organized for students to participate as a member or team leader. Action2:Assigned projects and presentations in the field of science and humanities			

PO 12 : Life-long Learning

PO 12	2.6	1.82	The attainment level is lesser than the target level. The target level was not attained by BEE2303, BEE2305, BEE2403 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: lectured to be delivered are focused on fundamental concepts. Action 2: The students are motivated to educate themselves about changing technological environment. Action 3: The relation between topics taught are to be explained with simple examples.			

PSOs Attainment Levels and Actions for Improvement- (2022-23)

PSOs	Target Level	Attainment Level	Observations
PSO 1 : Apply the knowledge of electric circuits, control systems, electrical machines, power electronics and power systems to solve complex engineering problems in the discipline of Electrical Engineering.			
PSO 1	2.6	2.555	The attainment level is slightly lesser than the target level set.
Action 1: The syllabus will be modified to encourage students to solve complex engineering problems through examples.			
PSO 2 : Develop suitable techniques and cutting-edge engineering hardware and software tools in electrical engineering to solve practical problems.			
PSO 2	2.6	2.615	The attainment level is slightly higher than the target level set.
Action 1: The target level set will be increased. Action 2: Making the student aware of the new technologies through industry visits.			
PSO 3 : Aware of the impact of professional electrical engineering solutions on social, economic, environmental and technological sustainability.			
PSO 3	2.6	2.51	The attainment level is slightly lesser than the target level set.
Action 1: Encouraging students to have the awareness towards environmental issues and to find solution.			

7.2 Academic Audit and actions taken thereof during the period of Assessment (15)

Inst

The Academic audit system is very active in the Institute. The Academic Audit, in our University is like program reviews, is a peer review process including a self-study by peers from within and outside the institution. The Academic audit is done in two phases: Internal Audit and External Audit. The internal audit team comprises of two faculties from each department (One with high credibility in teaching and research; the other one with exposure to accreditation, program administration). The members may be nominated by Competent Authority of the University. The members must be of equivalent rank of Professor.
The External audit is done by faculty members of other institution (Premium institution or accrediated one).

AUDIT Process: Department will prepare a Self Evaluation Document(SED) and submit it electronically to IQAC cell. The Audit team (Internal & External) phase wise will visit and conduct onsite evaluation through check of documents and interaction with faculties. The HOD of the Department and Head of Scool will give a presentation in front of the internal & external experts of audit team with respect to the programs offered, faculty list, Technical staff list, Research and Contribution by faculties, Development activities of the Department etc. The audit report will be prepared citing commendation, affirmation and recommendation for each school/unit. The report will be shared with Vice Chancellor/Dean Facult & Planning/Head of Scool/Head of Department. The Vice Chancellor/Dean Faculty planning will analyze the data and will make aware to the HOD and faculties about the loop holes and ask for improvement. The Vice Chancellor will finally share the comprehensive report of the Department and faculty members to skill development and technical education, Govt of Odisha.
The audit report comprises of following parameters:
1. **General Information:** Name of the Dept, Year of Establishment, No of Programmes, Categories of students, No of Faculties,Major features of the Dept etc
2. **Curriculam Aspects:** Curriculam design and development, Academic Flexibility, Curriculam Enrichment, Feedback System
3. **Teaching-Learning & Evaluation:** Student Enrolment and Profile, Catering to Student Diversity, Teaching-Learning Process, Teacher Quality, Evaluation Process and Reforms, Student Porcess and Reforms, Student Performance and Learning Outcomes
4. **Research, Consultancy & Extension:** Promotion of Research, Resource Mobilization for Research, Research Publication & Awards,Consultancy, Extension Activities & Departmenatl Social Responsibility, Collaboration
5. **Infrastructure & Learning Resources:** Physical Facilities, Library as a learning Resource, IT Infrastructure, Maintenance of Campus Facilities
6. **Student Support and Progression:** Student Mentoring and Support, Student Progression, Student Participation and Activities
7. **Governance, Leadership and Management:**Department Vision and leadership, Strategy Development and Deployment, Faculty Empowerment Strategies, Financial Management and Resource Mobilization, Internal Quality Assurance System
8. **Innovations and Best Practices**: Environment Consciousness, Innovations, Best Practices
9. **Overall Analysis:** Departmental Strengths, Departmental Weaknesses, Departmental Opportunities, Departmental Challenges
10. **Recommendation for Quality Enhancement of the Department** (To be given by the Experts)

7.3 Improvement in Placement, Higher Studies and Entrepreneurship (10)

Inst

Like other premier institutes of the country, VSSUT has also a well-established Training and Placement (T&P) cell which is a history of multiple decades. The T&P cell of VSSUT is proactive in conducting placement drives for students of the university. As department of Electrical Engineering is among the few branches that is present with the institute since its establishment, therefore alumnae of this department are now working in many prestigious companies, Government sectors, research organizations and academic institutes. Many of them have their own companies also where they are creating employments. As per the placement drives, the T&P cell contact the companies and vice-versa in which the placement team and alumnae work together for healthy number of placements. The placement cell has both student representatives and faculty advisor from each department. Dr. Raseswari Pradhan is now acting as the faculty advisor from department of Electrical Engineering. Various categories of companies are consulting for campus drives. Software companies like Infosys, Wipro, TCS, Cognizant, GLOBAL HITACHI, IBM codeknack, RELIANCE JIO MOBILITY, GenC, KFINTECH, DELOITTE, ASICZEN TECHNOLOGIES etc. are hiring students of Electrical Engineering each year in campus drive. Many high paying companies like Goldman Sachs, Google etc. are also coming for recruitment. Besides that, many core companies like L&T, Vedanta, JSW, Maruti-Suzuki, JSPL, TATA Power, J K Paper, Aqua green, Aditya Birla, SAPOORJI PALLONJI, Shri Mahavir Alloys, ADANI, DCM SHRIRAM etc. are also repeatedly recruiting students of the department. Companies like PRADAN and BIJU has also recruited some students of the department.
For enhancement of employability of the students, T&P cell is conducting many skill development programs like RedHat, Blue Prism, Robotics, Data Analytics, Cybersecurity, AI/ML, Virtual Cloud etc. In addition to this, the students of the department are trained through different workshops in technical writing using LATEX, Use of AI/ML toolboxes of MATLAB software, effective PPT presentation using advanced technologies like ChartGPT etc.

Parameter	CAYm1 (2022-23)	CAYm2 (2021-22)	CAYm3 (2020-21)
No. of Placement offers	163	116	125
No. of students placed	113	100	97
Highest Pay Package Offered	10.35 LPA (Maruti Suzuki)	10 LPA (JSPL)	10 LPA (BIJU)
GATE/ GRE/ GMAT/ CAT qualified students	27	16	28
Admission in premier institute	14	16	28
No. of Students tuned Entrepreneurs	0	0	0

Entrepreneurs:
List of Students of the Program Who have set up STARTUPs or Entrepreneurship

SL. No.	**Name of the Student**	**Year of passing**	**Name of STARTUP**
1	Rahul Krishna Nanda	2025	Wasper Tech
2	Guruprasad Pattnaik	2023	Career Monk
3	Jagannath Das	2023	FUME

7.4 Improvement in the quality of students admitted to the program (20)

Inst

Item		**2023-24**	**2022-23**	**2021-22**
National Level Entrance Examination	No of students admitted	156	156	126
	Opening Score/Rank	52516	64728	41955
JEE	Closing Score/Rank	979635	813157	770970
State/ University/ Level Entrance Examination/ Others	No of students admitted	0	0	0
	Opening Score/Rank	0	0	0
NA	Closing Score/Rank	0	0	0
Name of the Entrance Examination for Lateral Entry or lateral entry details	No of students admitted	12	12	12
	Opening Score/Rank	4	110	4
OJEE	Closing Score/Rank	166	567	166
Average CBSE/Any other board result of admitted students(Physics, Chemistry&Maths)		8.37	8.08	8.1

8 FIRST YEAR ACADEMICS (50)

Tot

8.1 First Year Student-Faculty Ratio (FYSFR) (5)

Please provide First year faculty information considering load

Name of the faculty member	PAN No.	Qualification	Date of Receiving Highest Degree	Area of Specialization	Designation	Date of joining	Teaching load (%)			Currently Associated (Yes / No)	Nature Of Association (Regular / Contract)	Date leav case Curr Ass is 'N
							CAY	CAYm1	CAYm2			
NUTAN SAHA	BKJPS1863B	ME/M. Tech and PhD	24/03/2021	Power Electronics and Drives	Assistant Professor	02/06/2014	50	50	50	Yes	Regular	
Ms. Bisaya Bh	BKRPB0288B	M.E/M.Tech	04/07/2014	Power System Engineering	Assistant Professor	09/10/2017	100	0	50	Yes	Regular	
Prangya Mohai	AWSPM0147J	ME/M. Tech and PhD	26/10/2022	Power Electronics and Drives	Assistant Professor	21/05/2015	50	0	0	Yes	Regular	
Mamun Mishra	AQSPM7628Q	M.E/M.Tech	15/06/2010	Power System Engineering	Assistant Professor	04/08/2011	0	50	50	Yes	Regular	
Mrs. S. S. Naik	AMRPN9434E	ME/M. Tech and PhD	24/02/2023	Production Engineering	Assistant Professor	05/06/2013	100	100	100	Yes	Regular	
Mr. L. Das	APHPD6974Q	M.E/M.Tech	06/06/2012	Machine Design and Analysis	Assistant Professor	18/10/2016	100	100	100	Yes	Regular	
Dr Ashapurna I	AZOPD4546P	M.Sc. and PhD	14/12/2020	Lingiustics	Assistant Professor	26/08/2009	100	100	100	Yes	Regular	
Dr Prasanta Ku	ATUPP5930H	M.Sc. and PhD	04/12/2014	Business Communication Indian Writing in English	Assistant Professor	11/02/2016	100	100	100	Yes	Regular	
Dr. Akhyaya K.	AQEPP1214F	M.Sc. and PhD	09/09/2003	Material Science	Associate Professor	16/01/2006	100	100	100	Yes	Regular	
Dr Mahendra k	AJAPJ8013D	M.Sc. and PhD	10/06/2008	Numerical Analysis	Associate Professor	13/01/2006	100	100	100	Yes	Regular	
Dr Smruti Ranj	BIQPM9888M	M.Sc. and PhD	16/10/2009	Applied Fluid Dynamics	Assistant Professor	10/06/2014	100	100	100	Yes	Regular	
Prof. M. R. Par	APRPP3733K	M.Sc. and PhD	04/07/2011	Experimental condensed matter physics	Professor	06/10/2016	100	100	100	Yes	Regular	

Year	Number Of Students(approved intake strength) N	Number of Faculty members(considering fractional load) F	FYSFR (N/F)	*Assessment=(5*20 to Max.5)
2021-22(CAYm2)	120	10	12	5
2022-23(CAYm1)	120	9	13	5
2023-24(CAY)	120	10	12	5
Average	120	9	12	5

AverageFYSFR: 0.00

Assessment [(5 * 15) / AverageFYSFR]: 5.00

8.2 Qualification of Faculty Teaching First Year Common Courses (5) Total Marks 5.00

Institute Marks : 5.00

Year	x (Number Of Regular Faculty with Ph.D)	y (Number Of Regular Faculty with Post graduate Qualification)	RF (Number Of Faculty Members required as per SFR of 20:1)	Assessment Of Faculty Qualification [(5x + 3y) / RF]
2021-22	6	2	6	6.00
2022-23	6	1	6	5.00
2023-24	8	2	6	7.00

Average Assessment: 6.00

8.3 First Year Academic Performance (10) Total Marks 6.57

Institute Marks : 6.57

Academic Performance	CAYm1(2022-23)	CAYm2(2021-22)	CAYm3 (2020-21)
Mean of CGPA or mean percentage of all successful students(X)	7.52	7.27	7.84
Total Number of successful students(Y)	125.00	125.00	115.00
Total Number of students appeared in the examination(Z)	158.00	138.00	126.00
API [X*(Y/Z)]	5.95	6.59	7.16

Average API[(AP1+AP2+AP3)/3] : 6.57

Assessment = Average API : 6.57

8.4 Attainment of Course Outcomes of first year courses (10) Total Marks 10.00

8.4.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcomes of first year is done (5)

Institute Marks : 5.00

All the courses offered in the first year of the program curriculum are broadly classified into 3 categories with their individual assessment methods:

1. Theory courses
2. Sessional courses

Course outcome attainment for each type of course is discussed below.

Course Category	Type of Assessment	Assessment Tools	Marks	Category	CO Attainment type
Theory	Direct	Assignments, Quiz tests (Formative assessments)	20	Cumulative Internal Examination (CIE)	Formative type
		Mid Semester Examination	30	Cumulative Internal Examination (CIE)	Direct CO Att. (70% weightage)
		End Semester Examination	50	Semester End Examination (SEE)	
	Indirect	Course Completion feedback			Indirect CO Att. (30% weightage)

Data Acquisition Process CO attainment of theory courses:

- For direct CO attainment, all the questions of mid-semester and end semesters are mapped with course outcomes during the preparation of the question paper.
- For the indirect CO attainment, semester-end feedbacks are collected by the department to acquire opinions about each CO from the students.
- Final computation of course outcomes attainment is done using direct and indirect Cos attainments through spreadsheets by the concerned faculty. CO attainment information will be compiled by the course coordinators and information passed on to the School Quality Assurance Cell and Program Assessment Committee for subsequent decisions and actions.
- The calculation for attainments is performed after the declaration of end-semester examination results. All documentations related to attainments are maintained by the course coordinators.

8.4.2 Record the attainment of Course Outcomes of all first year courses (5)

Institute Marks : 5.00

Course	Direct CO Attainment	Indirect CO Attainment	Final CO Attainment	Target CO Attainment	Target achieved (Y/N)
BEE2101	2.54	2.91	2.651	2.6	Y
BPH2101	2.41	2.76	2.515	2.6	N
BHU2102	2.56	2.65	2.587	2.6	N
BMA2101	2.31	2.87	2.478	2.6	N
BME2101	2.83	2.78	2.815	2.6	Y
BEE2191	2.82	2.63	2.763	2.6	Y
BPH2191	2.73	2.56	2.679	2.6	Y
BME2192	2.81	2.72	2.783	2.6	Y
BHU2191	2.72	2.61	2.687	2.6	Y
BEC2101	2.59	2.48	2.557	2.6	N
BCH2101	2.14	2.32	2.194	2.6	N
BCE2102	2.67	2.56	2.637	2.6	Y
BMA2201	2.43	2.34	2.403	2.6	N
BCS2102	2.37	2.42	2.385	2.6	N
BEC2191	2.81	2.78	2.801	2.6	Y
BCH2191	2.75	2.7	2.735	2.6	Y
BCE2192	2.93	2.79	2.888	2.6	Y
BCS2191	2.86	2.69	2.809	2.6	Y

8.5 Attainment of Program Outcomes from first year courses (20) Total Marks 20.00

8.5.1 Indicate results of evaluation of each relevant PO and/or PSO if applicable (10) Institute Marks : 10.00

POs Attainment:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BEE21	2.651	2.651	1.767	0.884	0.884	1.767	0.884	PO8	PO9	PO10	PO11	0.884
BPH21	2.515	2.515	1.677	0.838	2.515	1.677	0.838	0.838	2.515	2.515	0.838	0.838
BHU21	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	0.862	2.587	0.862	PO12
BMA21	2.478	2.478	1.652	1.652	0.826	1.652	0.826	PO8	PO9	PO10	0.826	0.826
BME21	2.815	2.815	1.877	0.938	1.877	PO6	PO7	PO8	2.815	0.938	PO11	0.938
BEE21	2.763	2.763	1.842	0.921	2.763	1.842	0.921	0.921	2.763	2.763	0.921	0.921
BPH21	2.679	2.679	1.786	0.893	2.679	1.786	0.893	0.893	2.679	2.679	0.893	0.893
BME21	PO1	PO2	0.928	PO4	1.855	1.855	0.928	0.928	2.783	0.928	1.855	0.928
BHU21	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	0.896	2.687	0.896	PO12
BEC21	2.557	1.705	2.557	2.557	1.705	0.852	1.705	PO8	PO9	PO10	PO11	0.852
BCH21	2.194	2.194	0.731	PO4	PO5	PO6	0.731	PO8	PO9	0.731	0.731	0.731
BCE21	2.637	1.758	1.758	1.758	0.879	1.758	2.637	0.879	1.758	1.758	1.758	2.637
BMA22	2.403	2.403	1.602	1.602	0.801	1.602	0.801	PO8	PO9	PO10	0.801	0.801
BCS21	2.385	2.385	2.385	2.385	1.590	PO6	PO7	PO8	1.590	PO10	PO11	2.385
BEC21	2.801	1.867	2.801	2.801	1.867	0.934	1.867	PO8	PO9	PO10	PO11	0.934
BCH21	2.735	0.912	1.823	PO4	0.912	PO6	1.823	PO8	0.912	PO10	0.912	PO12
BCE21	2.888	1.925	1.925	1.925	0.963	0.963	2.888	0.963	1.925	1.925	1.925	1.925
BCS21	2.809	2.809	2.809	2.809	1.873	PO6	PO7	1.873	2.809	PO10	PO11	2.809

PO Attainment Level

PSOs Attainment:

Course	PSO1	PSO2	PSO3
BEE21	2.65	2.65	2.65
BMA21	2.48	2.48	2.48
BPH21	2.52	2.52	2.52
BPH21	2.68	2.68	2.68
BEE21	2.76	2.76	2.76
BMA22	2.40	2.40	2.40
BEC21	2.56	2.56	2.56
BCS21	2.39	2.39	2.39
BEC21	2.80	2.80	2.80
BCS21	2.81	2.81	2.81

PSO Attainment Level

Course	PO1	PO2	PO3
Direct Attainment	2.60	2.60	2.60
PSO Attainment	2.60	2.60	2.60

8.5.2 Actions taken based on the results of evaluation of relevant POs and PSOs (10) Institute Marks : 10.00

POs Attainment Levels and Actions for Improvement- (2022-23)

POs	Target Level	Attainment Level	Observations

PO 1 : Engineering Knowledge

PO 1	2.6	2.62	The attainment level is slightly higher than the target level. The target level was not attained by BCH2101, BCS2102, BMA2201 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Students are encouraged to develop the engineering concepts to clear their fundamentals. Action 2: Syllabus need to be modified in the next curriculum. Action 3: Focus is made to include more engineering problems.			

PO 2 : Problem Analysis

PO 2	2.6	2.26	The attainment level is lesser than the target level. The target level was not attained by BCH2101, BCS2102, BMA2201 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Students are motivated to have more practical approach towards engineering problems. Action 2: More examples are included with the real world scenarios. Action 3: Students are encouraged to develop practical skill.			

PO 3 : Design/development of Solutions

PO 3	2.6	1.87	The attainment level is lesser than the target level. The target level was not attained by BCH2101, BCS2102, BMA2201 and the action taken are for the above mentioned courses for which the target was not met.
Action 1:Motivating them through examples of designing circuits and finding out its solution. Action 2: Encouraging students to take part in different technical clubs for designing. Action 3: Motivate students to include all standard parameters, safety norms and to address environmental concerns.			

PO 4 : Conduct Investigations of Complex Problems

PO 4	2.6	1.69	The attainment level is lesser than the target level. The target level was not attained by BCH2101, BCS2102, BMA2201 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Introducing laboratory equipment's with its usage. Action 2: Encourage Students to go for training/internship in industries. Action 3: Motivating them through laboratory experiments.			

PO 5 : Modern Tool Usage

PO 5	2.6	1.60	The attainment level is lesser than the target level. The target level was not attained by BCH2101, BCS2102, BMA2201 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Making the students aware with technologies development through different tools used in laboratories. Action 2: Encourage students to use the modern tool/research facilities available in department for the projects. Action 3: Arranging Workshops on modern tools and its applications.			

PO 6 : The Engineer and Society

PO 6	2.6	1.52	The attainment level is lesser than the target level. The target level was not attained by BCH2101, BCS2102, BMA2201 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Making students aware about their responsibility towards society as a engineer. Action 2: Discussing the social issues to make them realize, how they can help the society. Action 3: To motivate the students to join different activities on societal and health issues.			

PO 7 : Environment and Sustainability

PO 7	2.6	1.36	The attainment level is lesser than the target level. The target level was not attained by BCH2101, BCS2102, BMA2201 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Encourage students to involve them in societal activities. Action 2: Spreading awareness among the students about the environmental conditions and its adverse impact on human health. Action 3: Arrange visits to Substation, hazard and waste management plants.			

PO 8 : Ethics

PO 8	2.6	1.04	The attainment level is lesser than the target level. The target level was not attained by BCS2102 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Introducing Human Value courses.			

PO 9 : Individual and Team Work

PO 9	2.6	2.03	The attainment level is lesser than the target level. The target level was not attained by BCS2102 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Encouraging students for participation in social activities like visit to orphanages, old age home and other group activities.			

PO 10 : Communication

PO 10	2.6	1.95	The attainment level is lesser than the target level. The target level was not attained by BCH2101, BCS2102, BMA2201 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Encouraging students to participate in group discussions, presentation. Action 2: Motivating students to present papers in National/ International conferences. Action 3: Motivating the students to participate in debates in other colleges.			

PO 11 : Project Management and Finance

PO 11	2.6	1.10	The attainment level is lesser higher than the target level. The target level was not attained by BCH2101, BCS2102, BMA2201 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Team works will be organized so that actively students can participate as a member or team leader. Action 2: Assigning projects and presentations. Action 3: Small projects can be given to students and ask them to prepare the budget.			

PO 12 : Life-long Learning

PO 12	2.6	1.29	The attainment level is lesser higher than the target level. The target level was not attained by BCH2101, BCS2102, BMA2201 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Encouraging students to participate in courses like NPTEL, Coursera etc. Action 2: The students are motivated to educate themselves about changing technological environment. Action 3: Arranging guest lectures on new technological developmental tools and knowledge of new tools.			

PSOs Attainment Levels and Actions for Improvement- (2022-23)

PSOs	Target Level	Attainment Level	Observations
PSO 1 : Apply the knowledge of electric circuits, control systems, electrical machines, power electronics and power systems to solve complex engineering problems in the discipline of Electrical Engineering.			
PSO 1	2.6	2.6	The attainment level is achieved as required. The target level was not attained by BCH2101, BCS2102, BMA2201 and the action taken are for the above mentioned courses for which the target was not met.
Action 1: Identify future technologies and include as an elective courses. Action 2: Encourage students to select open elective courses offered by other departments. Action 3: Motivating students through simple real world problems.			
PSO 2 : Develop suitable techniques and cutting-edge engineering hardware and software tools in electrical engineering to solve practical problems.			
PSO 2	2.6	2.6	The attainment level is achieved as required.
Action 1: Awareness among students by showing the software tools like MATLAB, SCILAB, RT-LAB etc. used in laboratories.			
PSO 3 : Aware of the impact of professional electrical engineering solutions on social, economic, environmental and technological sustainability.			
PSO 3	2.6	2.6	The attainment level is achieved as required.
Action 1: Making the students aware regarding their responsibility as electrical engineer on social, economic and environmental issues.			

9 STUDENT SUPPORT SYSTEMS (50) Total Marks 50.00

9.1 Mentoring system to help at individual level (5) Total Marks 5.00

Institute Marks : 5.00

To address the various issues of students a university level committee **(SMCC, Student Monitoring and Counselling Committee)** has been developed which comprises many senior members of the concerned department. The term of the committee is for 2 years. SMCC will be responsible to address the personal and academic issues of students. They will meet the student representatives in regular intervals. Visit hostels to interact with wardens and students for better well beings of students' stay and food. SMCC can take up any other issues which they deem fit and improve the communication gap among students, faculty, and administration. On department level a list of faculties has been assigned as mentors for the concerned department students. On average there are 20 students under one faculty. Assigned faculties can address various student issues on personal basis.

9.2 Feedback analysis and reward /corrective measures taken, if any (10)

Total Marks 10.00

Institute Marks : 10.00

Feedback collected for all courses: **YES**
Average percentage of student who participate: **90**
Feedback collection process:
At the end of each academic session a google feedback form is shared with the students. A student has to fill the required details of himself/herself after that he/she has to rate different traits and aspects of the faculties related to lectures and subject taught. The rating is in the scale of very poor to excellent **(Very poor being assigned a score of 1 and Excellent is assigned a score of 5)**. For each trait or aspect an average has been calculated over the total number of participated students. Finally, an overall average has been calculated over the total number of traits **(1 being the lowest mark and 5 being the highest mark)**. The final awarded mark for the subject will be intimated to the concerned faculties for their reference and necessary improvement. The mapping between chosen option and scored value are as follows:

Trait/ Option	Score value
Very poor	1
Poor	2
Good	3
Very good	4
Excellent	5

9.3 Feedback on facilities (5)

Total Marks 5.00

Institute Marks : 5.00

On each academic session feedback on different aspects of the programme under the concerned department is collected from the students through **Internal Quality Assurance Cell (IQAC)**. Thereafter necessary corrective actions are taken as per higher authorities' instruction. The different types of feedback collected by the IQAC are as follows:

- Exit survey (UG/PG)
- Student satisfaction survey
- Program Educational Objectives (PEO) survey

9.4 Self-Learning (5)

Total Marks 5.00

Institute Marks : 5.00

The students are encouraged by the concerned faculties for self-study and exploration of new ideas. To enforce the same, study materials are provided in the University website under department page for various subjects. Study materials for various subjects are carefully prepared by the concerned faculties and updated as per requirement. Short term courses are arranged and students from under graduate and post graduates are encouraged to attend the same. Research lab facilities are there to facilitate the students with necessary equipment to aid their research workflow.

9.5 Career Guidance, Training, Placement (10)

Total Marks 10.00

Institute Marks : 10.00

Industrial visits are arranged to different places like power plants and power grids in order to explore the practical application of theoretical knowledge. Pre-placement talks are arranged by the university to aid the final year students in their campus drive placement. Multiple webinars by eminent personalities are arranged to encourage and educate the students about different career options.

9.6 Entrepreneurship Cell

Total Marks 5.00

Institute Marks : 5.00

To educate and encourage entrepreneurship mindset among students **TED TALKS** are arranged in which successful entrepreneurs participate to share their success journey with the students. For the same reason university level **E-Cell** has been created, which facilitates students' interaction with successful entrepreneurs.

9.7 Co-curricular and Extra-curricular Activities

Total Marks 10.00

Institute Marks : 10.00

On university level **NCC** and **NSS** groups facilities are there, which involves interested students from the department. Sports activities are encouraged through various sport events. Interested students also join inter college sports fest and necessary approval are streamlined for the same from the department. Department level fest like **'RESONANCE'** is arranged every year to encourage extra-curricular activities among students.

10 GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES (120)

Total Marks 120.00

10.1 Organization, Governance and Transparency (55)

Total Marks 55.00

10.1.1 State the Vision and Mission of the Institute (5) Institute Marks : 5.00

VISION

To emerge as an internationally acclaimed Technical University to impart futuristic technical education and creation of vibrant research enterprise to create quality engineers and researchers, truly world class leader and unleashes technological innovations to serve the global society and improve the quality of life.

MISSION

The Veer Surendra Sai University of Technology, Odisha, Burla strives to create values and ethics in its products by inculcating depth and intensity in its education standards and need based research through

- Participative learning in a cross-cultural environment that promotes the learning beyond the class room.
- Collaborative partnership with industries and academia within and outside the country in learning and research.
- Encouraging innovative research and consultancy through the active participation and involvement of all faculty members.
- Facilitating technology transfer, innovation and economic development to flow as natural results of research where ever appropriate.
- Expanding curricula to cater broader perspectives.
- Creation of service opportunities for upliftment of the society at large.

10.1.2 Availability of the Institutional Strategic Plan and its Effective Implementation and Monitoring (25) Institute Marks : 25.00

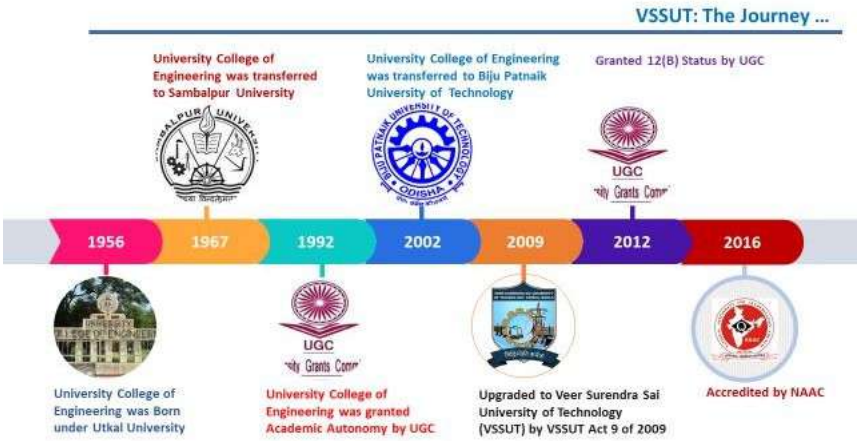
1. PREAMBLE

VSSUT Burla was established in 1956 as an engineering college in the name of the University College of Engineering (UCE) to solve a problem in society. As Hirakud Dam, independent India's first multi-purpose river dam was commissioned, there was a need for home-grown engineers to operate and maintain the dam that was meant to control flood, the powerhouse to generate power and a canal system to irrigate vast tract of land.

In the span of 66 years, the University has produced over 40,000 alumni. It has dedicated itself to the infrastructure, industrial growth, and socio-technical development of the state and nation as a whole. The roads, ports, dams, power plants, transmission lines, industries, irrigation projects, and rural electrifications are built-in Odisha with the overwhelming participation of its alumni. It has been playing a key role in the rural and urban developmental programs of the region; it is the central monitoring center for the State Government's programs such as Pradhan Mantri Gramya Sarak Yojana (PMGSY), Watershed projects, etc. Its alumni can be seen in the Boardrooms of leading PSUs and private companies; they occupied top positions in the Indian Army / Navy / Air Force, DRDO, and ISRO; they are on the faculty boards of almost all IITs, NITs, and many foreign Universities.

The University has carved a name for itself for its undiluted and uncompromising approach to education and the intensity of its teaching. In recognition of its contribution to society, the State Government upgraded it to a technical university in 2009. Presently, in addition to its rich undergraduate programs, it has preserved the strong legacy of research culture in terms of Post-graduate and research programmes in all disciplines of science and engineering.

2. VSSUT – THE JOURNEY SO FAR



The legendary institute had made a modest beginning in 1956 by taking 30 students each in three departments, viz Civil, Electrical & Mechanical, operating from the make-shift workshop of the Hirakud Dam. VSSUT presently offers 10 B.Tech., 22 M.Tech., B.Arch., MCA, and 3 M.Sc. programs, and details with seat strength are attached as **ANNEXURE-1**. Almost all B.Tech. programs are NBA accredited and rests have been applied for accreditation. Today, its students intake is 1644 in B. Tech, M. Tech, M Sc, MCA, Ph. D. and the total student strength on the campus is 4956.

In addition, 150 Research Scholars are pursuing their Ph. D. in various disciplines. VSSUT has been identified as the nodal center of the AICTE Quality Improvement programme for pursuing Ph.D. and also as the center for National Doctoral Fellowship (NDF) Scheme by AICTE. Ph. D. students are enrolled under the NDF scheme from 2018-19.

3. WINGS OF TRANSFORMATION AT VSSUT

In line with the Nation Education Policy -2020, VSSUT plans to expand its wings in line with a large-scale Multidisciplinary Education and Research University (**MERU**) to serve a larger mass of students of Odisha who are aspirants to pursue quality education at an affordable cost.

a. Increased intake at B. Tech. Level

VSSUT aspires to offer more B.Tech. Programs that are relevant in today's time and increase the student strengths in excess of 10,000 on the campus by 2028.

Programs	Current position in 2022		Projection by 2028	
Intake	Students Strength	Intake	Students Strength	
B. Tech. + B. Arch.	996	3810	2083	8332
M. Tech.	396	792	396	792
M.Sc. (2 yrs)+MCA	102	204	120	240
Ph.D.	150	150	500	1500
TOTAL	**1644**	**4956**	**3116**	**10,864**

b. Projection for other performance parameters

Parameters	Present	By 2028
On-time Graduation	85%	95%
GATE/ NET Coverage	40%	60%
Career & Placement	80%	95%
Innovation & Incubation	05	10 per year
Technology	CTTC ISRO	AI, Data Science, ML, Healthcare, Robotics and Automation, Modern Manufacturing
NIRF Ranking	116	Top 50 in India
NBA Accreditation	10 UG Courses 03 PG Courses	All UG & PG courses
NABL Accreditation	-	10 Labs
New Programs	02	11 UG and 5 PG programs
Faculty Hiring	220	550 (1:15 as per AICTE norms)

c. **Multi-Disciplinary Character**

Subsequently, besides Engineering and Sciences, it aspires to open a School of Medical Technology on one campus – making it a true **Multi-Disciplinary Institute**.

d. Skill Development Centre

VSSUT aspires not only to produce quality graduates in Engineering, and Medical Technology but also wants to open its laboratory facilities, faculties, and innovative students to equip the Diplomas and ITIs of Odisha with the necessary skills to be entrepreneurs or be Industry- ready.

e. Setting up R&D Laboratories in association with Industries

VSSUT aspires to be a cutting-edge Research Centre in association with MCL, Vedanta, Hindalco, and TPWODL. The lab will be dedicated to develop solutions by our faculty and students. It will also help to have result-oriented collaboration with the industry.

4. INFRASTRUCTURE REQUIREMENT

10.1.3 Governing body, administrative setup, functions of various bodies, service rules, procedures, recruitment and promotional policies (10)

Institute Marks : 10.00

List of Members of the Board of Management of VSSUT, Burla

Sl. No.	Name & address	Position	Nature of Membership
1	Prof. Bansidhar Majhi, Vice Chancellor, VSSUT, Burla	Chairman	Ex-officio
2	Smt. Usha Padhee, IAS, Principal Secretary to Government of Odisha, Skilled Development & Technical Education Department, Government of Odisha, Bhubaneswar	Member	-do-
3	The Director, Technical Education & Training, Odisha, Killa Maidan, Buxibazar, Cuttack - 1	Member	-do-
4	Additional Secretary to Govt. (ES-II) Finance Department, Govt. of Odisha, BBSR.	Member	-do-
5	Hon'ble Vice-Chancellor, Biju Pattnaik University of Technology, Odisha, Rourkela	Member	-do-
6	Shri Pradeep Dang, OAS (S) Registrar, VSSUT,Burla	Convenor-Cum-Secretary	-do-
7	Prof. Chintamani Mahapatra, Centre for Canadian, US& Latin American Studies School of International Studies, Jawaharlal Nehru University, New Delhi	Member	Nominee of UGC
8	Dr. Damodar Acharya, DN Oxy Park, Tower-II, 16th Floor, Flat No.2173, Dumduma, Bhubaneswar - 751019	Member	Nominee of AICTE
9	Prof. Debadutta Mishra , Professor in Prod. Engg.,VSSUT, Burla.	Member	Nominee of VC (Seniority-cum-rotation basis among Professors)
10	Prof. Sidharth Panda, Professor of Electrical Engg. VSSUT, Burla	Member	Academic Council Nominee
11	Prof. Sanjay Kumar Patro, Professor of Civil Engg. VSSUT, Burla	Member	Academic Council Nominee
12	Prof. S Karmalkar, Director, IIT, Bhubaneswar	Member	Chancellors Nominee(Reputed Institute)
13	Er. Ashesh Padhy, VP & Head-Project, JSW Paradip Steel Project.	Member	Chancellors Nominee(Alumni)
14	Prof. Sukumar Mishra, Professor in Electrical Engg., IIT, Delhi	Member	Chancellors Nominee(Alumni)
15	Shri Sarada Prasad Nayak, M.L.A, At-C/136, Sector-1, P.S. Sector-1	Member	Nominee of Odisha Legislative Assembly
16	Shri Sudam Marndi, M.L.A, Bija7yaramchandrapur, Ward No. 17., Bhanjpur, Dist- Mayurbhanaj	Member	Nominee of Odisha Legislative Assembly

Member of Academic Council		
Ex-officio member as per clause No.21-2a (i) of VSSUT Act 2008		
1.	Prof. Bansidhar Majhi, Vice-Chancellor (http://vssut.ac.in/vice-chancellor-s-message.php)	Chairman
Ex-officio members as per clause No.21-2a (ii) of VSSUT Act 2008		
2	Dean, Academic Affairs	Member Secretary
3	Dean, PGS&R	Member
4	Dean, SRIC	Member
5	Dean, CDCE	Member
6	Dean Students Welfare	Member
7	Dean, Faculty & Planning	Member
8	Dean, Alumni & International Relations	Member
9	Dean, School of Chemical & Bio-Sciences	Member
10	Dean, School of Computer Sciences	Member
11	Dean, School of Electrical Science	Member
12	Dean, School of Humanities & Basic Science	Member
13	Dean, School of Infrastructure & Planning	Member

14	Dean, School of Mechanical Sciences	Member
15	HOD, Chemical Engineering	Member
16	HOD, Civil Engineering	Member
17	HOD, Computer Sc. & Engineering	Member
18	HOD, Electrical Engineering	Member
19	HOD, Electrical & Electronics Engineering	Member
20	HOD, Electronics & TC Engineering	Member
21	HOD, Information Technology	Member
22	HOD, Mechanical Engineering	Member
23	HOD, Metallurgical & Materials Engg.	Member
24	HOD, Production Engineering	Member
25	HOD, Architecture	Member
26	HOD, Chemistry	Member
27	HOD, Mathematics	Member
28	HOD, Physics	Member
29	HOD, Humanities	Member
30	HOD, Computer Application	Member
31	Controller of Examination	Member
Ex-officio members as per clause No.21-2a (iii) of VSSUT Act 2008		
32	Prof. P.C. Swain, Professor, Civil Engg.	Member
33	Prof. B. B. Pati, Professor, Electrical Engg.	Member
34	Prof. R. K. Sahu, Professor, Electrical & Electronics Engg.	Member
35	Prof. Sanjay Agrawal, Professor, Electronics & TC Engg.	Member
36	Prof. H.S. Behera,Professor, Information Technology	Member
37	Prof. P.R.Dash, Professor Mechanical Engg.	Member
38	Prof. S.K. Badjena, Professor, Metallurgical & Materials Engg.	Member
39	Prof. D. Mishra, Professor, Production Engg.	Member
40	Prof. P.K. Kar, Professor, Chemistry	Member
41	Prof. S. K. Paikray, Professor,Mathematics	Member
42	Prof. Ganeswar Nath, Professor, Physics	Member
Ex-officio members as per clause No.21-2a (iv) of VSSUT Act 2008		
43	Dr. Debabrata Giri, Associate Professsor, Civil Engg.	Member
44	Dr. Kishore Kumar Sahu, Assistant Professor, Information Technology	Member
45	Sri Sanjib Kumar Nayak, Assistant Professor, Computer Application	Member
Members as per clause No.21-2b (i), (ii), (iii) of VSSUT Act 2008		
46	Prof. Niord Chandra Sahoo, Professor of Electrical Sciences, IIT, Bhubaneswar	Member
47	Prof. Kishanjit Kumar Khatua, Professor of Civil Engg., NIT, Rourkela	Member
48	Prof. Tushar Kumar Nath, Professor of Civil Engg., IGIT, Sarang	Member
Members as per clause No.21-2b (iv) of VSSUT Act 2008		
49	Mr. Saroj Kumar Panda, Regd. No. 2002090001, B.Tech, Mechanical Engg.	Member
50	Mr. Suraj Kumar Pal, Regd. No. 2002070039, B.Tech, Electronics & TC Engg.	Member
51	Ms. Swarnaprabha Dehury, Regd. No. 2205100006, M.Tech, MME	Member
52	Mr. Tanmaya Kumar, Regd. No. 2002090138, B.Tech, Mechanical Engg.	Member
External academic council members		
53	Prof. N. C. sahoo, Prof, Electrical sciences, IIT BBSR	External Member
54	Prof. K. K. Khatua, Prof Civil Engg, NIT RKL	External Member
55	Prof. T. K. Nath, Prof Civil engg, IGIT Sarang	External Member

Frequency of the meetings: Twice in a year and special meetings under obligations.
The information related to the frequency of the meetings; and attendance therein, minutes of the meetings and action-taken reports are available at https://www.vssut.ac.in/proceedings.php (https://www.vssut.ac.in/proceedings.php)
The published rules including service rules, policies and procedures available and disseminated to all stake holders and public at
VSSUT Act: https://vssut.ac.in/doc/VSSUT_ACT.pdf (https://vssut.ac.in/doc/VSSUT_ACT.pdf)
VSSUT Statute: https://vssut.ac.in/doc/VSSUT-Statute.pdf (https://vssut.ac.in/doc/VSSUT-Statute.pdf)

10.1.4 Decentralization in working and grievance redressal mechanism (5) Institute Marks : 5.00

ADMINISTRATION AT VSSUT, BURLA

01.	The Vice-Chancellor	Prof. Banshidhar Majhi (https://www.vssut.ac.in/administration.php)
02.	The Registrar	Shri Pradeep Dang
03.	The Comptroller of Finance	Sri Tularam Kalet, OFS-1 (SB)
04.	The Controller of Examinations	Dr. Achyut Kumar Panda (https://vssut.ac.in/faculty-profile.php?furl=achyut-kumar-panda)
05.	The Librarian	Dr. (Mrs.) Archita Nanda
06.	The Dean of the Students' Welfare	Prof. Sanjaya Kumar Patro (https://www.vssut.ac.in/faculty-profile.php?furl=sanjaya-kumar-patro-arch)
07.	The Dean, Academic Affairs	Prof. Sanjay Agrawal (http://www.vssut.ac.in/faculty-profile.php?furl=sanjay-agrawal)
08.	The Dean, Post-Graduate Studies & Research	Prof. Himanshu Sekhar Behera (https://vssut.ac.in/faculty-profile.php?furl=himanshu-sekhar-behera)
09.	The Dean, Faculty & Planning	Prof. Ramakanta Panigrahi
10.	The Dean, Alumni & International Relations	Dr. Anil Kumar Kar (http://www.vssut.ac.in/faculty-profile.php?furl=anil-kumar-kar)
11.	The Dean, Centre for Distance and Continuing Education	Prof. Saroj Kumar Sarangi (https://www.vssut.ac.in/administration.php)
12.	The Dean, Sponsored Research & Industrial Consultancy	Prof. Sukalyan Dash (https://www.vssut.ac.in/administration.php)
13.	HOS, School of Computer Sciences	Prof. Himanshu Sekhar Behera (https://vssut.ac.in/faculty-profile.php?furl=himanshu-sekhar-behera)
14.	HOS, School of Infrastructure & Planning	Prof. Sudhanshu Sekhar Das
15.	HOS, School of Mechanical Sciences	Prof. Debadutta Mishra
16.	HOS, School of Electrical Science	Prof. Sidhartha Panda
17.	HOS, School of Humanities & Basic Science	Prof. Jayaprakash Panda
18.	HOS, School of Chemical & Bio-Sciences	Prof. Jayadev Rana (http://www.vssut.ac.in/faculty-profile.php?furl=jaydev-rana)
19.	Medical Officer (on deputation from Government of Odisha)	Vacant
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21.	Workshop Superintendent	Dr. Rabindra Behera
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23.	Director, IQAC	Prof. Amarnath Nayak (https://www.vssut.ac.in/administration.php)
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27.	H.O.D., Chemical Engineering	Dr. Pankaj Charan Jena (http://vssut.ac.in/faculty-profile.php?furl=pankaj-charan-jena)
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31.	H.O.D., Computer Sc. & Engg.	Dr. Suvasini Panigrahi (https://vssut.ac.in/faculty-profile.php?furl=suvasini-panigrahi)
32.	H.O.D., Electrical Engineering	Dr. Papia Ray (http://www.vssut.ac.in/faculty-profile.php?furl=papia-ray)
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36.	H.O.D., Information Technology	Dr. Pradip Kumar Sahu (http://vssut.ac.in/faculty-profile.php?furl=pradip-kumar-sahu)
37.	H.O.D., Mathematics	Dr. Mahendra Kumar Jena (http://vssut.ac.in/faculty-profile.php?furl=mahendra-kumar-jena)

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85.	PIC, Mo College Abhijan & Coordinator NSS	Prof. A.K. Kar (https://www.vssut.ac.in/administration.php)
86.	NPS Coordinator	Mr. Suvendu Narayan Mishra (http://www.vssut.ac.in/faculty-profile.php?furl=suvendu-narayan-mishra)
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88.	Vice President, Students' Sports Society	Dr. Manas Ranjan Senapati (http://www.vssut.ac.in/faculty-profile.php?furl=manas-ranjan-senapati)
89.	Vice President, Students' Technical Society	Dr. Harish Kumar Sahoo (http://www.vssut.ac.in/faculty-profile.php?furl=harish-kumar-sahoo)
90.	Secretary, Alumni Association	Dr. Pradip Kumar Sahu (http://www.vssut.ac.in/faculty-profile.php?furl=pradip-kumar-sahu)

STUDENTS GRIEVANCE REDRESSAL

Student Grievance Redressal Committee (SGRC)

- Dean, Academic Affairs - Member-Convenor
- Dean, PGS & R - Member
- Dean, Faculty & Planning - Member
- Dean, CDCE - Member
- Dean, SRIC - Member
- Controller of Exams - Member

Note: In of case of any emergency, the aggrieved is free to go to Vice-Chancellor directly.
Dean, Students' Welfare, VSSUT has been appointed as the **'OMBUDSPERSON'** of the University. The 'OMBUDSPERSON' shall hear and decide the appeals of student(s) against the decision(s) of the **'Student Grievance Redressal Committee' (SGRC)**.
The above committee will only deal with student grievances that are not adhered in purview of Internal Complaints Committee, Anti-Ragging Committee, SC/ST Committee and Disciplinary committees.
The Committee can also address grievances from applicants to admission for various programs. The committee can address individual as well as collective grievances of the students of the University.
List of various level for addressing the issues on grievances are as under:-

Grievance	**FIRST LEVEL**	**SECOND LEVEL**	**THIRD LEVEL**
Particular Course Related	Concerned Heads	Dean Academic Affairs	**Student Grievance Redressal Committee' (SGRC)**
Academics Related	HoDs concerned/CoE	Dean Academic affairs	
Halls of Residences / Facilities Related	Asst Warden/Warden	Dean Student Welfare	
Mess affairs	Asst Warden/Warden	Dean Student Welfare	
Ragging	Warden/Dean Student welfare	Anti Ragging Cell	
Student Clubs/Societies	Faculty Advisor/Vice-President	Dean Student Welfare	
SC/ST Complaint	SC-ST Cell https://vssut.ac.in/doc/SCST_Cell_Edited_on_05-07-2020.pdf (https://vssut.ac.in/doc/SCST_Cell_Edited_on_05-07-2020.pdf)		
Sexual Harassment	Internal Complaints Committee https://www.vssut.ac.in/icc.php (https://www.vssut.ac.in/icc.php)		

10.1.5 Delegation of financial powers (5) Institute Marks : 5.00

ADMINISTRATION

01.	The Vice-Chancellor	Prof. Banshidhar Majhi (https://www.vssut.ac.in/administration.php)
02.	The Registrar	Shri Pradeep Dang
03.	The Comptroller of Finance	Sri Tularam Kalet, OFS-1 (SB)
04.	The Controller of Examinations	Dr. Achyut Kumar Panda (https://vssut.ac.in/faculty-profile.php?furl=achyut-kumar-panda)
05.	The Librarian	Dr. (Mrs.) Archita Nanda
06.	The Dean of the Students' Welfare	Prof. Sanjaya Kumar Patro (https://www.vssut.ac.in/faculty-profile.php?furl=sanjaya-kumar-patro-arch)
07.	The Dean, Academic Affairs	Prof. Sanjay Agrawal (http://www.vssut.ac.in/faculty-profile.php?furl=sanjay-agrawal)
08.	The Dean, Post-Graduate Studies & Research	Prof. Himanshu Sekhar Behera (https://vssut.ac.in/faculty-profile.php?furl=himanshu-sekhar-behera)
09.	The Dean, Faculty & Planning	Prof. Ramakanta Panigrahi
10.	The Dean, Alumni & International Relations	Dr. Anil Kumar Kar (http://www.vssut.ac.in/faculty-profile.php?furl=anil-kumar-kar)
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16.	HOS, School of Electrical Science	Prof. Sidhartha Panda
17.	HOS, School of Humanities & Basic Science	Prof. Jayaprakash Panda
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26.	H.O.D., Architecture	Dr. Bharati Mohapatra (http://vssut.ac.in/faculty-profile.php?furl=bharati-mohapatra)
27.	H.O.D., Chemical Engineering	Dr. Pankaj Charan Jena (http://vssut.ac.in/faculty-profile.php?furl=pankaj-charan-jena)
28.	H.O.D., Chemistry	Dr. Trinath Biswal (https://vssut.ac.in/faculty-profile.php?furl=trinath-biswal)
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35.	H.O.D., Humanities	Dr. Jayaprakash Paramguru (http://vssut.ac.in/faculty-profile.php?furl=jayaprakash-paramaguru)
36.	H.O.D., Information Technology	Dr. Pradip Kumar Sahu (http://vssut.ac.in/faculty-profile.php?furl=pradip-kumar-sahu)
37.	H.O.D., Mathematics	Dr. Mahendra Kumar Jena (http://vssut.ac.in/faculty-profile.php?furl=mahendra-kumar-jena)

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89.	Vice President, Students' Technical Society	Dr. Harish Kumar Sahoo (http://www.vssut.ac.in/faculty-profile.php?furl=harish-kumar-sahoo)
90.	Secretary, Alumni Association	Dr. Pradip Kumar Sahu (http://www.vssut.ac.in/faculty-profile.php?furl=pradip-kumar-sahu)

The financial powers delegated to the Vice chancellor, Registrar, The Comptroller of Finance, Deans, Heads of Departments, Hostel Wardens and relevant in-charges of the institution are explicitly mention in the VSSUT Act (https://vssut.ac.in/doc/VSSUT_ACT.pdf (https://vssut.ac.in/doc/VSSUT_ACT.pdf)) and Statute (https://vssut.ac.in/doc/VSSUT-Statute.pdf (https://vssut.ac.in/doc/VSSUT-Statute.pdf)).

10.1.6 Transparency and availability of correct/unambiguous information in public domain (5) Institute Marks : 5.00

The correct/unambiguous information on policies, rules, processes to stakeholders is made transparently available in public domain at https://www.vssut.ac.in/ (https://www.vssut.ac.in/) (University website)

10.2 Budget Allocation, Utilization, and Public Accounting at Institute level (15) Total Marks 15.00

:

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3
CFY : (Current Financial Year),
CFYm1 : (Current Financial Year minus 1),
CFYm2 : (Current Financial Year minus 2) and
CFYm3 : (Current Financial Year minus 3)

Table 1 - CFY 2023-2024

Total Income 1574968398				Actual expenditure(till…): 1581031889			Total No. Of Students 4329
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
152511050	679020000	710990997	32446351	804296697	76735192	700000000	365218.73

Table 2 - CFYm1 2022-2023

Total Income 1196173168				Actual expenditure(till…): 1243814199			Total No. Of Students 3123
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
192880199	954760784	13225798	35306387	1096980395	146833804		398275.44

Table 3 - CFYm2 2021-2022

Total Income 1157593002				Actual expenditure(till…): 1042726978			Total No. Of Students 3968
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
183542101	923789000	5912187	44349714	867835246	174891732		262784.02

Table 4 - CFYm3 2020-2021

Total Income 891416198				Actual expenditure(till…): 954597290			Total No. Of Students 4011
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
229667807	610331000	6081266	45336125	807799836	146797454		237994.84

Items	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till	Budgeted in 2020-2021	Actual Expenses in 2020-2021 till
Infrastructure Built-Up	7100000	7767351	3084878	1277353	260875(	169924(	570000(	1249561
Library	1900000	8929028	2425000	7692601	100000(	506505(	194000(	1159821
Laboratory equipment	2000000	1862485	1500000	2391752	720000(	155483(	720000(	2311030
Laboratory consumables	2000000	1862485	1500000	2391752	720000(	155483(	720000(	2311030
Teaching and non-teaching stal	8587001	6715195	7800747	7559227	690428(	762621(	550919(	7484228
Maintenance and spares	7125000	1081280	2369000	1956028	100500(	435479(	100500(	3413486
R&D	5807420	5807420	1140587	1140587	8727112	8727112	8762183	8762183

Training and Travel	650000	3177154	620000	1668574	150000	692831	150000	401354
Miscellaneous Expenses*	1082347	7771637	728703	8430465	5346664	9851320	5269264	6284683
Others, specify								
Total	**1819492260**	**1558422440**	**979339710**	**1013073528**	**1049447372**	**1053008920**	**663424663**	**965023130**

10.2.1 Adequacy of budget allocation (5) Institute Marks : 5.00

The University prepares budgets under the head Plan & Non-plan for all the departments based on the minimum requirement. The budget is bi-annually submitted to Government for their consideration. The Accounts Section of the University also provides the budget for salary of both teaching and non teaching staff members under non-plan head. The budget is prepared by the statutory Finance Committee by collecting individual budget from all departments, schools, sections and central accounts as per issued directives. Budget is allotted to each department towards up-gradation of laboratories, laboratory consumables and repair of laboratory equipment etc., internal adjustments are made as per the urgency, in specific cases. Thrust is given on development of infrastructure, academic development programme, research, etc. Each laboratory maintains its own record in the form of stock register which records the information related to new purchases, repairs etc. The allocated budget gets sanctioned based on the budget predictions given by the departments for every academic year on the basis of past experience and anticipated future projects.

10.2.2 Utilization of allocated funds (5) Institute Marks : 5.00

The allocated funds have been utilized for the purchase of new laboratory equipment (computers), software, training and travel and other miscellaneous expenses for academic activity. Actions for procurement of lab equipment, up-gradation of existing lab facilities, purchase of consumables etc. are initiated from the respective departments and the funds are released on proposal basis on recommendation by committees and approval by the Vice Chancellor/ BOM as per the allocated financial power. Major works like construction, up gradation of existing infrastructure, procurement and maintenance of common utilities, house-keeping, procurement of furniture etc. are controlled by the central facilities such as Central Stores, Central Computing Facility, Civil Works and Electrical Maintenance. The budget amount is allocated for the creation of capital assets and to cover operational expenses according to budgetary guidelines. Capital assets encompass items such as laboratory equipment, study resources, and laboratory facilities. Operational expenses include salaries, research promotion, maintenance, spares, and other relevant expenditures. The utilization heads are detailed in the audited statements of accounts for each year.The utilization certificate is regularly submitted to Govt. of Odisha after due utilization of funds every year.
During the last three years, the budget was utilized to meet expenses such as staff salaries, infrastructure development, purchase of equipment, expenses towards consumables and contingencies, travel etc.

10.2.3 Availability of the audited statements on the institute's website (5) Institute Marks : 5.00

The funds released by the Govt. are fully utilized following the norms prescribed by the Govt. The funds received from the Govt. are subject to Local Fund and Comptroller and Auditor General (CAG) audit from time to time.

10.3 Program Specific Budget Allocation, Utilization (30) Total Marks 30.00

:

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3
CFY: (Current Financial Year),
CFYm1 : (Current Financial Year minus 1),
CFYm2 : (Current Financial Year minus 2) and
CFYm3 : (Current Financial Year minus 3)

Table 1 :: CFY 2023-2024

Total Budget 2700000		Actual expenditure (till…): 1799324		Total No. Of Students 615
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
2500000	200000	1624302	1,75,022	2925.73

Table 2 :: CFYm1 2022-2023

Total Budget 1190000		Actual expenditure (till…): 1423218		Total No. Of Students 615
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
990000	200000	1270918	152300	2314.18

Table 3 :: CFYm2 2021-2022

Total Budget 700000		Actual expenditure (till…): 208126		Total No. Of Students 615
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
600000	100000	134063	74063	338.42

Table 4 :: CFYm3 2020-2021

Total Budget 9670000		Actual expenditure (till…): 7171334		Total No. Of Students 615
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
9635000	35000	7139348	31986	11660.71

Items	**Budgeted in 2023-2024**	**Actual Expenses in 2023-2024 till**	**Budgeted in 2022-2023**	**Actual Expenses in 2022-2023 till**	**Budgeted in 2021-2022**	**Actual Expenses in 2021-2022 till**	**Budgeted in 2020-2021**	**Actual Expenses in 2020-2021 till**
Laboratory equipment	1500000	133342C	20000	14300	0	0	5000000	4114362
Software	0	0	0	0	0	0	2000000	1470500
Laboratory consumable	200000	175022	200000	152300	100000	74063	35000	31986
Maintenance and spares	0	0	100000	95439	0	0	0	0
R & D	200000	20860	70000	69219	0	0	2000000	1417500
Training and Travel	100000	45000	100000	89660	0	0	100000	75000
Miscellaneous Expenses*	500000	50000	500000	850000	500000	60000	500000	30000
Total	**2500000**	**1624302**	**990000**	**1270918**	**600000**	**134063**	**9635000**	**7139348**

10.3.1 Adequacy of budget allocation (10)

Institute Marks : 10.00

At the onset of the financial year, each department and unit compiles budget needs classified into recurring and non-recurring categories. These allocations are subsequently determined according to the existing funds. Oversight of expenditure falls under the purview of the Comptroller of Finance, who has the authority to approve additional allocations for specific situations. The institution diligently tracks expenses to ensure vital requirements are fulfilled while upholding the institutions operational efficiency.

At the commencement of the academic session, the Heads of Departments are informed about the allocated funds for their budget proposals. This includes funding for significant projects such as construction, infrastructure upgrades, procurement and maintenance of utilities, and housekeeping etc.

10.3.2 Utilization of allocated funds (20)

Institute Marks : 20.00

At the onset of the academic session, all department heads receive notifications regarding the allocated funds for their budget proposals. The procurement of laboratory equipment, consumables are undertaken by the Head of Departments with due procedure mentioned in **VSSUT Act (**https://vssut.ac.in/doc/VSSUT_ACT.pdf (https://vssut.ac.in/doc/VSSUT_ACT.pdf)**) and Statute (**https://vssut.ac.in/doc/VSSUT-Statute.pdf (https://vssut.ac.in/doc/VSSUT-Statute.pdf)**).** Significant projects such as construction, infrastructure upgrades, procurement and maintenance of utilities, housekeeping, furniture acquisition, development of faculty programmes/ conferences are overseen directly by the Comptroller of Finance in collaboration with the Heads of Schools, Deans, Central Stores, Central Computing Facility, Civil Works and Electrical Maintenance and Registrar. The Head of the Department is provided with an imprest money to meet day to day expenses and the Departments manage their own imprest accounts.

10.4 Library and Internet (20)

Total Marks 20.00

10.4.1 Quality of learning resources (hard/soft) (10)

Institute Marks : 10.00

Library overview

The library building is a three storied having area of 10,900 sq.m. The Ground floor is used for the Circulation Section, Stack area, Reprographic Section, and the General Book Bank. The first floor houses the Acquisition Section, Journal Section, Magazine & Newspaper section, and the Administrative Section of the Library. The top floor is used for E-resource Centre, Reference section, Text Book Section and SC/ST Book bank, Reading Room.

Bird's eye-view of the print & e-Resources

- ***Print Resources***

Print Resources	
Books Titles	10724
Books Volumes	68162
Periodicals	30
Bound Volume	9626
Theses, Dissertations	739

- ***E-Resources***

e-Resources	
eBooks	• 311 (Elsevier's Science Direct) • World E-book Library • South Asia Archive(SAA)
e-journal Database	Elsevier's Science Direct ISID JCCC
e-Journals	3563+

1. **Relevance of available learning resources including e-resources**

E-journals & Databases Collections

- **Elsevier's Science Direct :** 743 nos of e-journals
- **American Institute of Physics:** 19 e-journals on Physics, Chemistry, geoscience, engineering , acoustics and more.
- **Springer Link:** 1725 e-journals
- **Taylor & Francis:** 1078 e-journals
- **Institute for Studies in Industrial Development (ISID):**

  The On-Line Database Index covers 252 Indian social science journals covering the disciplines of economics, political science, public administration, sociology, social anthropology, business management, finance, geography, social work, health and education, etc and 15 newspapers.
- **JGate Pluss(JCCC):** Around 7900+ jounals

Bibliographic E-Database

- Scopus
- Web of Science

E-BOOKS

- 311 nos of Elsevier's Science Direct ebooks
- World e-book Library
- South Asia Archive(SAA)

Library Automation & Information Management Tools

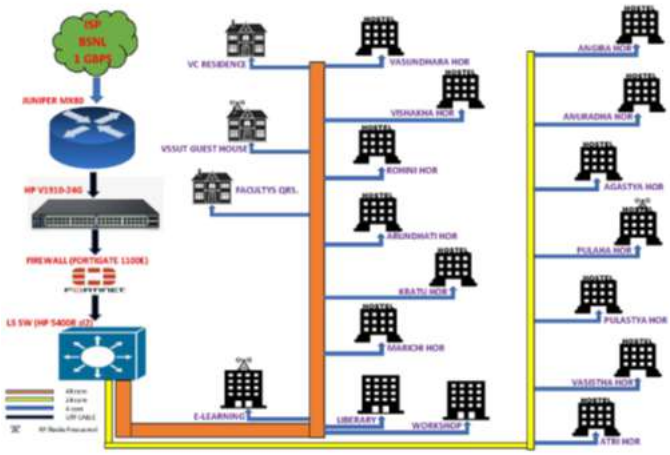
- KOHA ILMS 17.4 : Library Automation Software
- D-Space Institutional Repository: 9626 bound volume journals are accessible to user.
- Turnitin iThenticate: Plagiarism Software
- DrillBit: Plagiarism Software
- IRINS VIDWAN Database: Research support service to users

2. **Library Services:**

- Web OPAC is used by library patrons to search for materials without a librarians assistance. It is designed to be searched by title, author, subject, or keyword in an interface that is more user-friendly than the previous card catalog.
- Access to a wide range of physical and digital resources such as books, journals, databases, and multimedia materials.
- Assistance with information retrieval, including help with searching for and locating relevant sources for research projects.
- Reference services, where librarians are available to answer questions and provide guidance on research strategies.
- Interlibrary loan services (DELNET), allowing users to request materials from other libraries if they are not available in the universitys collection.
- Instructional sessions and workshops on topics such as information literacy, citation management, and research skills.
- Access to study spaces, computer workstations, and printing, scanning, and photocopying facilities.
- Online resources and services, including access to e-books, e-journals, and online databases, as well as virtual reference assistance.
- Research support services available to the users to enhance their research work through IRINS VIDWAN Database.
- Institutional Repository (Dspace): 9626 nos of bound volume journals are accessible to users.

10.4.2 Internet (10) Institute Marks : 10.00

Name of the Internet provider and Bandwidth: Currently 2 ISPs provider and bandwidth provided by the ISPs providers are as follows:
1Gbps Internet connectivity from BSNL
1Gbps Internet connectivity from SIFY
Currently VSSUT is having a dedicated internet connectivity of 2 Gbps.
Wi Fi availability:
The controller and access points are used in the Hostels of the University to provide uninterrupted internet access to the students for their academic and research work. Wi-Fi and LAN is provided to the academic and administrative buildings for faculty and staff members for their research and administrative work.
Networking: OFC / Ethernet connection from CIF Cell to all campuses. It is a secure network and each user has authentication for accessing our network. The networking switches are used at different campuses. The network backbone is illustrated as below.



Security arrangements: As far as the security is concerned VSSUT provides the security at different levels of distribution to the client level. It has Core Layer switch, Firewall and CISCO controller for protecting students and staffs members from being affected from any DOA attack, hacking from outside and inside VSSUT. It also prevents malware and virus attacks. Intrusion Prevention System threat-detection, URL filtering, Web content filtering, application filtering and signature based filtering.

Annexure I

(A) PROGRAM OUTCOME (POs)

Engineering Graduates will be able to:

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

(B) PROGRAM SPECIFIC OUTCOME (PSOs)

Program should specify 2-4 program specific outcomes.

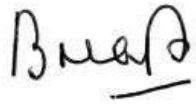
PSO1	Apply the knowledge of electric circuits, control systems, electrical machines, power electronics and power systems to solve complex engineering problems in the discipline of Electrical Engineering.
PSO2	Develop suitable techniques and cutting-edge engineering hardware and software tools in electrical engineering to solve practical problems.
PSO3	Aware of the impact of professional electrical engineering solutions on social, economic, environmental and technological sustainability.

Declaration

The head of the institution needs to make a declaration as per the format given -

- I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines inforce as on date and the institutes hall fully abide by them.
- It is submitted that information provided in this Self Assessment Report is factually correct.
- I understand and agree that an appropriate disciplinary action against the Institute willbe initiated by the NBA. In case, any false statement/information is observed during pre-visit, visit, postvisit and subsequent to grant of accreditation.

Head of the Institute
Name : Prof. Banshidhar Majhi
Designation : Vice Chancellor
Signature :



Seal of The Institution :

Place : Burla
Date : 13-08-2024 17:18:13