

Annual Report 2021-22

Silicon Institute of Technology

| An Autonomous Institute | Silicon Hills, Patia, Bhubaneswar www.silicon.ac.in

Message from the Chairman

It is gratifying to see Silicon outperforming itself each successive year by setting higher standards in the field of engineering education. In the past two decades, Silicon has added many commendable achievements to its cap such as UGC autonomy, NBA accreditation of 3 UG programs and NAAC - A grade. Silicon's NIRF ranking too has been 161 this year while it was 163 last year. It is satisfying to see this leap over succeeding years in the teaching-learning standards. It is indeed the result of the hard work of all Siliconites who still aim at setting higher standards in the field of engineering studies.

It is also satisfying to see that more and more faculty members getting actively engaged in research work- pursuing their PhDs, publishing research papers & patents, attending and organizing conferences, workshops, seminars, etc. I am also very happy with the Silicon's newly started Ph.D. program with 42 enrolled students under different disciplines in its first batch. This will further enhance the research work at Silicon resulting a greater number of quality research publications. Also, the recruitment process in this academic session continued as usual despite the pandemic. Major recruiters such as Infosys, WIPRO, TCS, Cognizant, Cozentus, Aptuslab, Hexaware and Spikewell continued to employ our students in good number.

I wish Silicon long years of service, as an Institute of excellence, to the state of Odisha and the public at large.

Joe Madiath

Vision

"To become a center of excellence in the fields of technical education and research and create responsible citizens"

Mission

"To provide the best of technical skills, professional ethics and human values in enriching the disciplines of Science, Engineering and Technology for social development and Nation building"

Profile

Silicon Institute of Technology was established in 2001 with the objective of providing value-based quality technical education. The Institute has a fully functional campus located close to Infocity where IT giants like Infosys, TCS, and Wipro have their Development Centres. The Silicon Bhubaneswar Campus has witnessed remarkable growth over the past two decade. The sprawling campus is abuzz with academic and extra-curricular activities of more than 2000 students under the guidance of nearly 157 Teaching staff members and 242 Non-teaching staff members who support them in the pursuit of academic excellence. Adding to the strength of the Silicon family is a strong network of nearly 7500 alumni. With over a decade's existence, the Institute has carved a niche for itself on the academic map of India.

Governing Body

The Governing Body consists of eminent educationists, technocrats, representatives of the affiliating University and government institutions who are known for their progressive approach and dedication to the cause of education and social development. The members are:

1.	Mr. Joe Madiath	(Chairman)
2.	Mr. Nitai Gaur Dhall	(Trustee)
3.	Mr. Sanjeev Nayak	(Trustee)
4.	Mr. Ramananda Mishra	(Trustee)
5.	Mr. Jitendra Prasad Singh	(Trustee)
6.	Dr. Manoj Fogla	(Trust Nominee)
7.	Prof. Sunil Sarangi	(Educationist)
8.	Prof. B. K. Das	(Educationist)
9.	Prof. Srikanth Sundarajan	(Industrialist)
10.	Mr. Devesh Sinha	(Industrialist)
11.	Mr. Ashok Basa	(Industrialist)
12.	Prof. Sanjib Tokekar	(UGC Nominee)
13.	Mr. Tapan Kumar Satapathy	(Govt. Nominee)
14.	Dr. Bibhuti Bhusan Pati	(BPUT Nominee)
15.	Prof. Jaideep Talukdar	(Staff Nominee)
16.	Prof. Saroj Kanta Misra	(Secretary GB)

Our 5L Quality Policy

We are committed to offer the best academic services to our learners through continuous innovative practices by providing high quality Lectures, state-of-the-art Laboratories, excellent Library facilities and ensuring its utilization through experiential Learning and Leadership.

Silicon Best Practices

Over a period of 20 years, Silicon has evolved its set of best practices that has contributed to its emergence as a centre of excellence. Some of these practices include:

- Democratic and decentralized governance
- Secular campus with no religious bias
- Orientation program for newly appointed faculty members
- Online feedback from students on the performance of faculty members
- Dedicated Examination Halls with closed circuit cameras
- Quality Circle meetings for improvement of academic, social and environmental issues
- Orientation program for new entrants and parents meet every year
- Seminars by senior faculty members and industry experts
- Training of students for placement examination and interview
- Yoga as a compulsory subject for all students
- Institution e-mail ID for all staff members
- Special classes for academically weak students
- Peer teaching in different subjects by final year students
- Chamber consultancy/assistance available to students
- Standard guidelines for faculty members to prepare lesson plans and course handouts
- Data Management System on ERP to send lecture notes and study material to students
- In-house projects under the guidance of faculty members
- Annual Function and Tech Fest for all round development of the students
- Students' Council to manage students' affairs, their betterment, and also social causes
- Institution of the Best Student of the Year Award
- Art of Living Happiness Program for faculty members at regular intervals
- Swachh Bharat Abhiyaan by students and faculty members across the city
- Dedicated in-house counseling cell for mental health wellness

Highlights

- The institution has a campus area of 18.113 acres and a built-up area of around 356059 sq. ft., which is well maintained and provides an overall conducive academic environment. The Institute has come up with an additional built-up area of 1, 15, 500 sq. ft. which would augment the existing facilities at the Institute such as library, examination halls, computer laboratories, classrooms, and administrative offices.
- The Institute has an Auditorium with a capacity of 350 seats and features a state-of-theart audio-visual system for conferences, lectures, movie shows and theater performances.

- The Institute has a library housed in a large hall of 17000 sq. ft. and is the centre of intellectual activities. It has well over 64,500+ books and subscribes to many international journals. It comprises with a reading room which can accommodate 450 users at a time, special cubicles for focused study, and discussion rooms for collaborative study.
- All the buildings in the campus have Wifi connectivity providing 400 Mbps with Reliance Jio Infocomm Ltd as the service partner for carrying out academic and administrative processes.
- The Institute has a Skylab, an outdoor Wifi Zone for students with seating arrangements around a picturesque fountain.
- The Institute makes use of an ERP system to manage its academic and administrative processes. This includes processes like class attendance, uploading study material, exam sitting plan, SMS to parents, library search, log in and log out for staff members, processing of leaves etc.
- All classrooms have LCD Projectors to facilitate the teaching-learning process.
- Conferences, Seminars, Workshops and Group Discussions are conducted regularly in the Seminar Halls, the Remote Centre, and the new Lecture Theatres.
- The Campus has its own sports ground for different outdoor games like football, cricket and volley ball, along with dedicated basketball and badminton courts.
- There is separate facility for indoor games like Table Tennis, Carrom and Chess.
- The Campus has Yoga Centre and Multi-Gym facility for students and staff members.
- The Campus has separate hostels for boys and girls which can accommodate 1423 residents in the campus. The girls' hostel can accommodate 550 residents and the boys' hostel can accommodate 873 residents. All the three hostels are fitted with modern amenities and out of the total hostel seats 237 (96-girls, 141-boys) are AC.
- The Guest House facility is available for visiting parents and faculty members.
- The Institute provides residence facility to faculty members.
- A host of centralized facilities like canteen, parking, in-campus medical facility, dispensary and transport services are provided to all students and staff members.

Affiliation & Approval

The Institute is affiliated to the Biju Patnaik University of Technology, Odisha and offers 11 different programs of study in the fields of Engineering & Technology. All the programs are approved by the All India Council for Technical Education (AICTE) MHRD, Government of India, and also recognized by the Directorate of Technical Education & Training (DTET), Government of Odisha. The Institute is recognized by the University Grants Commission under section 2(f) of UGC Act. The institute is running as an Autonomous Institute since 2018-19 AY and three of the UG programs - CSE, ECE and EEE are accredited by NBA.

UG Programs

Sl. No.	Program Name	Intake
1	B. Tech. in Computer Science & Engineering	
2	B. Tech. in Computer Engineering	60
3	B. Tech. in Computer Science & Technology	60
4	B. Tech. in Electrical & Electronics Engineering	150*
5	B. Tech. in Electronics & Communication Engineering	180
6	B. Tech. in Electronics & Instrumentation Engineering	60

PG Programs

Sl. No.	Program Name		
1	Master in Computer Applications		
2	M. Sc. (Data Science)	30	
3	M.Tech. in Electronics & Communication Engineering	9	
4	M.Tech. in Computer Science & Engineering	9	
5	M.Tech. in Electrical & Electronics Engineering	9	

Admissions Process

The admissions process is done through the centralized counseling of Odisha Joint Entrance Examination (OJEE) in accordance with the norms/guidelines prescribed by the state government for this purpose. The Institute provides detailed information about the admission process through its prospectus and also through its website. The Institute also adheres to the reservation policies of the state government and the regulations in this regard to ensure equity and access to different sections of the society. As the Institute attracts a large number of students from other states, the reservation policies as applicable in this case are also adhered to.

- The Institute conducts counseling for aspiring students in all important town and cities of the state and at major urban cities in the nearby states for pursuing professional courses in Engineering and MCA.
- The students seeking admission in the Institute usually include the top 25% students appearing for the JEE Main Exams. At the same time, the Institute also has the distinction of being the preferred choice of students during the central counseling, making an early exit from the process as the seats get filled.
- The Institute enjoys the unique distinction of having the highest percentage of admission for UG programs among the private affiliated colleges of the state.
- The Institute also admits 20% seats to Diploma holders who join the B. Tech. program through Lateral Entry.

Admission Statistics: 2021-22

Program	Branch	Sanctioned	Admitted	student	Total	Reg	ular	Late	eral
		Intake	Regular	Lateral		Male	Female	Male	Female
	CSE	180	184	20	204	130	54	12	8
	CEN	60	63	11	74	45	18	5	6
B.Tech.	CST	60	62	4	66	42	20	3	1
B. rech.	ECE	180	189	6	195	119	70	3	3
	EEE	150	86	6	92	63	23	6	0
	EIE	60	16	0	16	11	5	0	0
	CSE	9	2	0	2	0	2	0	0
M.Tech.	ECE	9	1	0	1	1	0	0	0
	EEE	9	3	0	3	2	1	0	0
MCA	MCA	60	63	0	63	34	29	0	0
M.Sc.	DS	30	12	0	12	6	6	0	0
Total		807	681	47	728	453	228	29	18

Catering to Diverse Needs

- The Institute offers Remedial Courses to the students upon joining so that they can adjust to the academic environment of Silicon with ease. This offering is unique to Silicon being a front-ranking Institute with novel academic practices. The senior residents in the hostels also provide the necessary support by conducting peer teaching sessions during the initial semesters. The Institute also plays the role of a facilitator here by providing the necessary infrastructural support for peer learning.
- The Institute conducts a comprehensive Orientation Program for newly admitted students in order to help them prepare for the course of study in different branches.
- Based on the data provided by students regarding their academic performance at the school and college levels, and also the assessment carried out by our team of teachers and mentors, an identification of the slow and weak learners is done, identifying in the process the advanced learners too. Accordingly, the slow and weak learners are given learning support in terms of extra classes, remedial classes etc. by the teachers and the mentors as required so that they can improve and learn in a better way. Faculty members also give more attention to such students as and when required.
- Tutorials are also a part of the set of academic instruments used at the Institute in order to ensure effective learning on part of the student.
- The Institute also follows a system for mentoring students with the help of a Faculty Advisor. A group of 30 students are assigned to a faculty member who interacts with them on a regular basis and helps them solve their academic as well as personal problems. The Faculty Advisor also advises them with regard to co-curricular and extra-curricular activities, thus becoming a friend, philosopher and guide to the students, helping them in shaping their future in a responsible manner.

Scholarships at Silicon

The Institute received a large number of applications for scholarship during the academic year 2021-22 and awards were made under the categories:

SI. No	Name of Scholarship	Total Students
1	E-Medhabruti Scholarship-Fresh	104
2	Post Matric Scholarship-Fresh & regular	67
3	E-Kalyan Jharkhand-Fresh & Regular	02
4	Credit Card Loan-Bihar	07
5	National Scholarship	26

Student Support & Progression

- The Institute provides a ragging free atmosphere to the students.
- The Institute has provision for lateral entry admission in the 3rd semester. The students admitted through the lateral entry scheme are provided proper academic support and guidance so that they can quickly adapt to Silicon's qualitative academic culture.
- The performance of students in exams is generally good which gets demonstrated by the high marks they secure, resulting in good CGPAs. On an average, a vast majority of them are selected by reputed companies during the campus placement. The dropout rate at the Institute is negligible.
- The Institute has ample provision for scholarship and other forms of financial assistance which is given to meritorious and deserving students.
- The Institute encourages students to participate in a large number of inter-collegiate competitions in curricular as well as extra-curricular fields. Students have represented the Institute in many such events and won a large number of prizes in recognition of their talent.
- The Institute also encourages students to appear for exams such as GATE, IES, CAT, XAT, GRE, GMAT and TOEFL. Nearly 50-60% students in the Institute go in for these exams and the Institute supports them through coaching/testing facilities for such exams by arranging suitable resource persons. Such efforts have been widely appreciated by students and the impact is seen in terms of the high grades scored by students and also their qualifying these exams.

Library Resources

The teaching learning processes and research activities are supported by the different facilities and services offered by the library at the Institute. In addition to borrowing, reprographic and printing facilities are also available to all the users. During AY 2021-22, the library resources were augmented by acquiring 207 new titles and 425 volumes making a total resource repository of 9860 titles and 39419 volumes. There are 38267 titles of E-books under Proquest e-book central subscription and 13337 titles of E-books under Elsevier e-book collections. The library also subscribes to E-Resources: 206 journals and 1528 Conference proceedings from IEEE (ASPP + POP), 294 journals (Engineering & Computer Science) from Science Direct and 171 Journals (Engineering), 99 Journals (Computer science), 171 Journals (Chemistry & Material Science) from Springer Nature Collections.

Academic Cycle

There are a number of programs which run concurrently at the Institute, to the formation of an academic cycle which includes a specified number of teaching days. The number of teaching days, excluding examinations days, holidays, and suspended classes for the different semesters, odd and even during 2021-22 are as follows:

Odd Semester

Even Semester

1st Semester - 70 Days2nd Semester - 75 Days3rd Semester - 75 Days4th Semester - 70 Days5th Semester - 75 Days6th Semester - 70 Days7th Semester - 78 Days8th Semester - 74 Days

Academic Performance

Program	Year	Branch	Appeared	Passed	Failed	%Success
	2	AEI	15	15	0	100.00
	2018-2022	CSE	197	197	0	100.00
	018-	EEE	93	89	4	95.70
	2	ECE	150	145	5	96.67
	1	AEI	37	33	4	89.19
	2017-2021	CSE	192	176	16	91.67
	017-	EEE	125	114	11	91.20
	2	ECE	166	150	16	90.36
		AEI	56	51	5	91.07
	020	CSE	120	105	15	87.50
Ė	2016-2020	EEE	113	88	25	77.88
B. Tech.		ETC	183	163	20	89.07
B.		IT	54	49	5	90.74
	2015-2019	AEI	47	33	14	70.21
		CSE	116	95	21	81.90
		EEE	121	81	40	66.94
		ETC	169	127	42	75.15
		IT	53	42	11	79.25
		AEI	35	26	9	74.29
	018	CSE	97	79	18	81.44
	2014-2018	EEE	112	78	34	69.64
	201	ETC	150	115	35	76.67
		IT	47	24	23	51.06
МСА	2020-2022	MCA	58	53	5	91.38
IVICA	2019-2022	MCA	30	30	0	100.00

Program	Year	Branch	Appeared	Passed	Failed	%Success
	2018-2021	MCA	53	51	2	96.23
	2017-2020	MCA	50	42	8	84.00
	2016-2019	MCA	51	41	10	80.39
	2015-2018	MCA	32	26	6	81.25
MSc. DS	2020-2022	DS	16	16	0	100.00
	2018-2020	EEE	1	1	0	100.00
	2010 2021	CSE	2	2	0	100.00
M.Tech.	2019-2021	EEE	1	1	0	100.00
	2020-2022	CSE	1	1	0	100.00

Teaching - Learning - Evaluation Process

- The Institute follows a non-negotiable Academic Calendar for all its academic processes. The Institute has the distinction of having one of the best Teaching, Learning and Evaluation processes among the engineering institutes in the state.
- The schedule of academic and extra-curricular activities is prepared well in advance by all the departments so that the activities and events can be effectively organized.
- The teaching learning processes at the Institute are student-centered. The methodologies used include integrated learning, self-learning and ICT based learning.
- The detailed progress records of students with regard to attendance, learning and evaluation are maintained by their respective faculty advisors who regularly monitor the students' performance and advise them on how they can improve in different areas.
- The Institute has a dedicated air-conditioned e-evaluation centre to facilitate eevaluation of answer scripts of semester-end BPUT examinations.

Research, Consultancy & Extension

- Faculty members are provided academic and financial support to take up research projects independently as well as in collaboration with industry.
- Adequate budgetary provisions are made to strengthen research facilities and infrastructures upon the recommendations of the Research Advisory Committee.
- Students of the UG/ PG programs are assigned with research-based project works.
- Consultancy for government bodies, public and private sector enterprises is taken up from time to time.
- The Institute organizes a number of seminars on technical and specialized themes which are based on the research undertaken by faculty members and students.
- The Student Subject Committees also organize seminars and talks in different areas to promote a culture of research and extension services.

• The Institute has collaborated a number of leading organizations both in academia and industry to enhance its research and consultancy output.

Teacher Quality

- Faculty members are selected as per the guidelines of AICTE and UGC, through open advertisement on an all India basis. The Selection Committee for such appointments is constituted in accordance with AICTE/UGC norms.
- Out of 157 faculty members of the Institute, 68 hold Ph. D. Degrees. Furthermore, 09 have submitted their thesis and others are continuing with their Ph.D. research or are in the process of registration under various universities.

Professors	20
Associate Professors	36
Assistant Professors	101
Total	157

- The faculty student ratio at the Institute is maintained at 1:16, as per the students' strength.
- All faculty members are regular and permanent employees. AICTE guidelines are strictly adhered to while assigning faculty workload.
- The Institute is committed to excellence in teaching, research and scholarship and actively facilitates professional development of faculty by following a transparent policy mentioned in its Service Condition Manual. These policy guidelines are upgraded regularly, depending on requirement.
- The Institute not only facilitates professional development of its faculty members through the liberal policy of study leave, but also through financial assistance and rewards.
- The Institute provides financial support to faculty members for making presentations in national and international conferences, seminars, workshops and to participate in FDPs, QIPs etc. In-house FDPs are also regularly held.
- The Institute provides financial support to faculty members for membership in professional bodies/organizations and learning societies of repute.

Faculty Excellence

To offer quality technical education to students, the Institute emphasises a great deal on the continuous update and enhancement of knowledge and skills of the faculty and staff members. This is best reflected in the Institute's policy to encourage faculty and staff members to pursue higher studies and acquire qualifications like Ph. D. and D. Sc. by allowing them study leave along with financial support. During the AY 2021-22, the following faculty members were continuing their research under different universities while on study Leave.

Name	Program of Study (Ph.D. /Post Doc)	Institution
Jagadish Patra	Ph.D.	SOA University
Santunu Sarangi	Ph.D.	IIT, Khargpur
Sadhna Malik	Ph.D.	IIT, Khargpur

Name	Program of Study (Ph.D. /Post Doc)	Institution
Satish Das	Ph.D.	NIT, Goa
T. Dinesh Verma	Ph.D.	IIT, Khargpur

Faculty Members Awarded with a Ph. D. Degree

SI.	Name/Designation	Thesis Title	Date of	Awarding
No.	/Dept.		Award	University/ Institution
1	Dayal Kumar Behera (Assistant Professor, CSE)	Designing Personalized Recommendation System using Hybrid Features and Machine Learning Models	11.08.2021	KIIT Deemed- to-be University
2	Debasmita Pradhan (Associate Professor, CSE)	Machine Learning for Functional Characterization of Proteins	08.10.2021	KIIT Deemed- to-be University
3	Amiya Bhusana Sahoo (Assistant Professor, ECE)	Design of Patch Antennas using different Optimization Techniques for Microwave Applications	02.11.2021	VSSUT, Burla
4	Nalini Singh (Sr. Asst. Professor, EIE)	Electroencephalography Signal Analysis using Soft Data Mining Approaches	09.12.2021	FM University, Balasore
5	Annapurna Mishra (Sr. Asst. Professor, ECE)	Machine learning Approaches for Biometric applications	11.12.2021	FM University, Balasore
6	Anita Mohanty (Associate Professor, EIE)	Minimization of Traffic Congestion in Vehicular Ad Hoc Network (VANET)	07.03.2022	Utkal University
7	Monorama Swain (Associate Professor, ECE)	Automatic Classification of Discrete Emotions in Various Dialects of Odia Speech	30.07.2022	BPUT, Odisha

Publications: Journal Publications

1. Namita Das and **Swarupa Roy**, "Fredholm Toeplitz Operators on the Weighted Bergman Spaces", Annals of the Academy of Romanian Scientists: Series on Mathematics and its Applications, Vol. 13, No. 1-2/2021, pp. 178-194, July, 2021

- 2. Monalisa Mohanty, **Manasa Dash**, Pradyut Biswal, and Sukanta Sabut, "Classification of ventricular arrhythmias using empirical mode decomposition and machine learning algorithms.", Progress in Artificial Intelligence, Springer, Vol. 10, pp. 489-504, July, 2021
- 3. Dayal K. Behera, M. Das, S. Swetanisha, and P. K. Sethy, "Hybrid model for movie recommendation system using content K-nearest neighbors and restricted boltzmann

machine", Indonesian Journal of Electrical Engineering and Computer Science, Vol. 23, No. 1, pp. 445-452, July 2021

- 4. **Sudhansu M. Biswal, Satish K. Das**, Sarita Mishra, Umakanta Nanda, and Biswajit Jena, "Study of Analog/RF and linearity Performance of Staggered Heterojunction Gate Stack Tunnel FET", ECS Journal of Solid-State Science and technology, Vol. 10, No. 7, July, 2021
- Anurag Shrivastavaa, Chinmaya Kumar Nayak, R. Dilip, Soumya Ranjan Samal, Sandeep Rout, and Shaikh Mohd Ashfaque, "Automatic robotic system design and development for vertical hydroponic farming using IoT and big data analysis", Materials Today: Proceedings, July, 2021, DOI: 10.1016/j.matpr.2021.07.294
- R Kavithaa, R. Rajeswarib, Sudhansu Shekhar Patrac, and Suchismita Rout, "QMwalletChain: Blockchain Traceability using Working Vacation Queueing Model in Mobile Wallet", Turkish Online Journal of Qualitative Inquiry, Vol. 12, No. 8, pp. 2876-2889, July, 2021
- Mukti Routray and Swati Vipsita, "Protein remote homology detection combining PCA and multiobjective optimization tools", Evolutionary Intelligence, Springer, DOI: 10.1007/s12065-021-00642-6, August, 2021
- 8. **Nivedita Pati** and Babita Panda, "Three state switchwing cell boost converter using H-inf controller", International Journal of Emerging Electric Power Systems, De Gruyter, Vol. 23, No. 4, August, 2021
- 9. Ajit Kumar Behera, Mrutyunjaya Panda, and Satchidananda Dehuri, "Software reliability prediction by recurrent artificial chemical link network", International Journal of System Assurance Engineering and Management, Springer, DOI: 10.1007/s13198-021-01276-8, September, 2021
- Sarita Mishra, Sudhansu Mohan Biswal, Biswajit Baral, Sanjit Swain, and Sudhansu K. Pati, "Study of Analog/Rf and Stability Investigation of Surrounded Gate Junctionless Graded Channel MOSFET (SJLGC MOSFET)", Silicon, Springer, DOI: 10.1007/s12633-021-01397-6, October, 2021
- 11. Ajit Kumar Behera, Ch. Sanjeev Kumar Dash, Mrutyunjaya Panda, Satchidananda Dehuri, and Rajib Mall, "A state-of-the-art neuro-swarm approach for prediction of software reliability", International Journal of Advanced Intelligence Paradigms, Vol. 20, No. 3-4, pp. 296-322, November, 2021
- 12. Biranchi Narayan Rath and Bidyadhar Subudhi, "A robust model predictive path following controller for an Autonomous Underwater Vehicle", Ocean Engineering, Vol. 244, Article No. 110265, December, 2021
- Monorama Swain, Tanmaya Tapaswini Tripathy, Rutuparna Panda, Sanjay Agrawal, and Ajith Abraham, "Differential exponential entropy-based multilevel threshold selection methodology for colour satellite images using equilibrium-cuckoo search optimizer", Engineering Applications of Artificial Intelligence, Vol. 109, Article No. 104599, December, 2021

- 14. Sanghamitra Das, Tara Prasanna Dash, Devika Jena, Eleena Mohapatra, and Chinmay Kumar Maiti, "Strain-engineering in AlGaN/GaN HEMTs: impact of silicon nitride passivation layer on electrical performance", Physica Scripta, Vol. 96, No. 12, Article No. 124074, December, 2021
- 15. Ambarish G. Mohapatra, Jaideep Talukdar, Tarini Ch. Mishra, Sameer Anand, Ajay Jaiswal, Ashish Khanna, and Deepak Gupta, "Fiber Bragg grating sensors driven structural health monitoring by using multimedia enabled iot and big data technology", Multimedia Tools and Applications, Springer, DOI: 10.1007/s11042-021-11565-w, January, 2022
- 16. Nisarga Chanda, Sarosij Adak, Sanjit K. Swain, Sudhansu Mohan Biswal, and A. Sarkare, "Performance enhancement of normally off InAIN/AIN/GaN HEMT using aluminium gallium nitride back barrier", Computers & Electrical Engineering, Elsevier, Vol. 98, Article No. 107695, January, 2022
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- Krutideepa Bhol, Umakanta Nanda, Biswajit Jena, Shubham Tayal, and Sudhansu M Biswal, "Development of an analytical model of work function modulated GAA MOSFET for electrostatic performance analysis", Physica Scripta, Vol. 97, January, 2022
- 19. Subhra Swetanisha, Amiya Ranjan Panda, and **Dayal Kumar Behera**, "Land use/land cover classification using machine learning models", International Journal of Electrical and Computer Engineering, Vol. 12, No. 2, pp. 2040-2046, February, 2022
- 20. Millee Panigrahi, **Dayal Kumar Behera**, and Krishna Chandra Patra, "Epileptic Seizure Classification of EEG Signals using Extreme Gradient Boosting Classifier", Indonesian Journal of Electrical Engineering and Computer Science, Vol. 25, No. 2, pp. 884-891, February, 2022
- Anita Mohanty, S. K. Mohanty, B. Jena, Ambarish G. Mohapatra, Ahmed N. Rashid, A. Khanna, and D. Gupta, "Identification and evaluation of the effective criteria for detection of congestion in a smart city", IET Communications, Wiley, DOI: 10.1049/cmu2.12344, February, 2022
- P P Maiti, Ajit Dash, S Guhathakurata, Sanghamitra Das, Atanu Bag, T P Dash, G Ahmad, C K Maiti, and S Mallik, "Experimental and simulation study of charge transport mechanism in HfTiOx high-k gate dielectric on SiGe heterolayers", Bulletin of Materials Science, Vol. 45, No. 39, February, 2022
- 23. Prasanta Kumar Parida, Lingraj Dora, **Monorama Swain**, Sanjay Agrawal, and Rutuparna Panda, "Data science methodologies in smart healthcare: a review", Health and Technology, DOI: 10.1007/s12553-022-00648-9, February, 2022
- 24. Aruna Kumar Behura, Chinmaya Prasad Mohanty, Manas Ranjan Singh, Ashwini Kumar, Emanoil Linul, and Dipen Kumar Rajak, "Performance Analysis of Three Side Roughened Solar Air Heater: A Preliminary Investigation", Materials 2022, Vol. 15, No. 7, pp. 1-17, March 2022

- 25. **Manoranjan Behera**, "Study of Optical, Thermal, Mechanical and Microstructural Properties of Fullerene/Poly (vinylidene fluoride) Polymer Nanocomposites", Biointerface Research in Applied Chemistry, Vol.13, No.2, pp.121-130, March, 2022
- 26. **Lopamudra Mitra** and Ullash Kumar Rout, "Optimal control of a high gain DC- DC converter", International Journal of Power Electronics and Drive Systems (IJPEDS), IAES, Vol. 13, No. 1, pp. 256-266, March, 2022
- 27. G. P. Pappu, T. Krishna, B. Biswal, P. K. Karan, P. K. Biswal, S. Hasan, and **Debasish Nayak**, "A deeply supervised maximum response texton based SegNet for simultaneous multi retinal lesion segmentation", International Journal of Imaging & System Technology, Wiley, DOI: 10.1002/ima.22723, March, 2022
- J. Jena, D. Jena, E. Mohapatra, Sanghamitra Das, and T. P. Dash, "FinFET-Based Inverter Design and Optimization at 7 Nm Technology Node", Silicon, DOI: 10.1007/s12633-022-01812-6, March, 2022
- 29. Monorama Swain, Bubai Maji, P. Kabisatpathy, and Aurobinda Routray, "A DCRNN-based ensemble classifier for speech emotion recognition in Odia language", Complex & Intelligent Systems, DOI: 10.1007/s40747-022-00713-w, March, 2022
- Mahmoud Al Ahmad, Suchismita Rout, Sudhansu Shekhar Patra, and Bibhudatta Sahoo, Harishchandra Dubey, and Rabindra Kumar Barik, "AttentiveSDN: EndHost Awareness-Based Power-Optimized Software-Defined Networks", Journal of Information Technology Research (JITR), IGI, global, Vol. 15, No. 1, pp. 1-22, March, 2022
- 31. Sushant Kumar Pattnaik, Soumya Ranjan Samal, Shuvabrata Bandopadhaya, Kaliprasanna Swain, Subhashree Choudhury, Jitendra Kumar Das, Albena Mihovska, and Vladimir Poulkov, "Future Wireless Communication Technology towards 6G IoT: An Application-Based Analysis of IoT in Real-Time Location Monitoring of Employees Inside Underground Mines by Using BLE", Sensors, Vol. 22, April, 2022.
- 32. B Maji, **Monorama Swain**, and Mustaqeem, "Advanced Fusion-Based Speech Emotion Recognition System Using a Dual-Attention Mechanism with Conv-Caps and Bi-GRU Features", Electronics, Vol. 11, No. 9, April, 2022
- 33. Debangana Das, S. Nag, A. Adaval, A.Kr. Hazarika, S. Sabhapondit, A. R. Bhattacharyya, B. Tudu, R. Bandyopadhyay, and R. Banerjee Roy, "Amine Functionalized MWCNTs Modified MIP-Based Electrode for Detection of Epicatechin in Tea", IEEE Sensors Journal, DOI: 10.1109/JSEN.2022.3169169, April 2022
- Swarupa Roy and Namita Das, "Toeplitz operators with bounded harmonic symbols", Ann. Acad. Rom. Sci.: Series on Mathematics and its Applications, Vol. 14, No. 1-2, pp.166-179, May, 2022
- 35. **Pulaka Sahoo, Pamela Chaudhury**, and J. R. Mohanty, "Improving effort estimation of software products by augmenting class point approach with regression analysis", Intelligent Decision Technologies, IOS press, pp. 1-11, May, 2022

- 36. Janemajya Senapati, Bhabani Shankar Dash, and Ranjan Kumar Dash, "Sustainable Entrepreneurship and Economic Development in India", Journal of Emerging Technologies and Innovative Research, Vol. 9, No. 5, May, 2022
- 37. **Ch. Sanjeev Kumar Dash, Ajit Kumar Behera**, Satchidananda Dehuri, and Sung-Bae Cho, "Building a novel classifier based on teaching learning-based optimization and radial basis function neural networks for non-imputed database with irrelevant features", Applied Computing and Informatics, Vol. 18, No. 1/2, pp. 151-162, June, 2022
- 38. Dayal Kumar Behera, Madhabananda Das, SubhraSwetanisha, and Janmenjoy Nayak, "XGBoost regression model-based electricity tariff plan recommendation in smart grid environment", International Journal of Innovative Computing and Applications (IJICA), Vol. 13, No. 2, June, 2022
- 39. **Nalini Singh** and Satchidananda Dehuri, "Epilepsy detection from electroencephalogram signal using singular value decomposition and extreme learning machine classifier", International Journal of Biomedical Engineering and Technology, Vol. 39, No. 1, June 2022
- 40. Shreya Nag, Debangana Das, Hemanta Naskar, Bipan Tudu, Rajib Bandopadhyay, and Runu Banerjee Roy, "Detection of Metanil Yellow Adulteration in Turmeric Powder Using Nano Nickel Cobalt Oxide Modified Graphite Electrode", IEEE Sensors Journal, DOI: 10.1109/JSEN.2022.3178768, June, 2022
- 41. Dhananjaya Tripathy, Debiprasad Priyabrata Acharya, **Prakash Kumar Rout,** and **Sudhansu Mohan Biswal**, "Influence of oxide thickness variation on analog and RF performances of SOI FinFET", Facta Universitatis. Series: Electronics and Energetics (FUEE Journal), Vol. 35, No. 1, 2022

Conference Proceedings Published

- K. B. Mohanty, A. Sahu, and Rabi N. Mishra, "Development of MPC-ACO based Direct Torque Controller for Induction Motor Drive", In proc: 4th Biennial International Conference on Nascent Technologies in Engineering (ICNTE), IEEE, pp. 1-7, July, 2021
- Amiya B. Sahoo, Suchismita Sahu, Rituparna Sahoo, Siddharth Sahu, B. B. Mangaraj, "Miniaturized Microstrip Patch Antenna Design using Metamaterial", In proc: 5th International Conference on Computer, Communication and Signal Processing (ICCCSP -2021), IEEE, pp. 177-180, July, 2021
- Navin Chandra and Soumya Priyadarsini Panda, "A Human Intruder Detection System for Restricted Sensitive Areas", In proc: 2nd IEEE International Conference on Range Technology (ICORT-2021), IEEE, pp. 1-4, November, 2021
- Kanungo Barada Mohanty, Abhimanyu Sahu, and Rabi Narayan Mishra, "Neural Network Model-based Direct Torque and Flux Predictor for Induction Motor Drive", In proc: 47th Annual Conference of the IEEE Industrial Electronics Society (IECON 2021), IEEE, pp. 1-6, November, 2021

- 5. Sanghamitra Das, Aradhana Raju, and T. P. Dash, "Geometry Dependent RF Performance of FinFETs", In proc: 2021 International Conference in Advances in Power, Signal, and Information Technology (APSIT), IEEE, pp. 1-4, December, 2021
- 6. Saroja Kumar Rout, Bibhuprasad Sahu, Bikram keshari Mishra, and Debabrata Singh, "Artificial Neural Network Modeling for Prediction of Coronavirus (COVID-19)", In proc: 2nd International Conference on Advances in Distributed Computing and Machine Learning (ICADCML 2021), Springer, pp. 328-339, January, 2022
- Nibedita Swain, Nivedita Pati, and Babita Panda, "Design of a 3-State Switching cell Converter using Hybrid Fuzzy PID and H-infinity Controller", In proc: IEEE-TENCON, IEEE, pp. 317-322, February, 2022
- Pulak Sahoo and J. R. Mohanty, "Model-based Test Effort Estimator a Case Study", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 96-99, March, 2022
- Dayal Kumar Behera, Shreela Dash, Ajit Kumar Behera, CH. Sanjeev Kumar Dash, "Extreme Gradient Boosting and Soft Voting Ensemble Classifier for Diabetes Prediction", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 191-195, March, 2022
- Sarat Chandra Nayak, Ch. Sanjeev Kumar Dash, Ajit Kumar Behera, Bijan Bihari Mishra, "A machine learning approach for estimating compressive strength of concrete structures using an artificial electric field algorithm-based neuro-fuzzy predictor", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 229-233, March, 2022
- Soumya Priyadarsini Panda and Krishna Singh, "Automatic Speaker Verification Under Spoofing Attack", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 196-199, March, 2022
- Soumya Priyadarsini Panda and Navin Chandra, "A Visual Question Answering System using YOLO Model", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 256-260, March, 2022
- Samaleswari Prasad Nayak, Suchismita Rout, Surajit Das, and Sudhansu Shekhar Patra, "Error rate reduction of Air Quality Parameters in Health Care Industry using SD-IoT Environment", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 454-459, March, 2022
- Debasmita Pradhan, Bijan Bihari Misra, Biswajit Sahoo, and Dilip Kumar Jena, "Evolutionary Teaching-Learning Based Modified Polynomial Classifier", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 313-318, March, 2022
- 15. Dipak Ranjan Nayak, Ambarish Gajendra Mohapatra, Bright Keswani, Anita Mohanty, Pradyumna Kumar Tripathy, and Amiya Kumar Samantaray, "IoT enabled predictive maintenance of diesel generator in the context to Industry 4.0", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 364-368, March, 2022

- Saumyaranjan Dash, Asif Uddin Khan, Santosh Kumar Swain, and Binayak Kar, "Clustering Based Efficient MEC Server Placement and Association in 5G Networks", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 167-172, March, 2022
- Deepak Sahoo, Nayan Ranjan Paul, Rakesh Chandra Balabantaray, and Asif Uddin Khan, "Sarcasm Detection Using Deep Learning", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 331-335, March, 2022
- Manas Ranjan Nayak, Ajaya Kumar Parida, Parthasarathi Pattnayak, and Asif Uddin Khan, "An Image Watermarking Framework based on Saliency and Phase Congruency using LSB Matching Technique", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 369-374, March, 2022
- Debabrata Singh, Asif Uddin Khan, Raghunath Dey, Amarnath Mishra, and Pradip Kumar Nanda, "IoT Based Municipality Drinking Water System through NFC and SCADA", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 478-483, March, 2022
- Nilima R. Das, P. Ganga Raju Achary, and Satyananda C. Rai, "QSAR and Molecular Docking Studies for the Inhibition of MAPK Interacting Kinase", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 72-77, March, 2022
- Subhra Swetanisha, Amiya Ranjan Panda, and Dayal Kumar Behera, "Change Detection using Machine Learning Models: A Case Study on the Puri District of Odisha, India", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 72-77, March, 2022
- 22. Nibedita Swain, Sadhna Malik, and Nivedita Pati, "Design and Analysis of Step up Regulator using Exact Feedback Linearization by State Feedback Approach", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 443-447, March, 2022
- Rabi N. Mishra, K. B. Mohanty, A. Sahu, and Ipsita Pahi, "TLO-based Neural Discrete Predictive Approach for DTFC Induction Motor Drive", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 437-442, March, 2022
- Lopamudra Mitra and Ullash K. Rout, "Comparative study of multi-stage boost converter for high voltage and high-power application", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 422-427, March, 2022
- 25. Satish K. Das, Sudhansu Mohan Biswal, Biswajit Baral, and Lalatindu Giri, "Performance Analysis of Hetero junction Tunnel FET Biosensor", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 433-436, March, 2022
- Utpal Das, Bijayananda Patnaik, and Prakash Kumar Rout, "Multiplexed Is-OWC system design using advanced modulation techniques", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp.173-177, March, 2022
- 27. Dhananjaya Tripathy, Debiprasad Priyabrata Acharya, **Prakash Kumar Rout**, and **Debasish Nayak**, "The impact of GATE thickness variation on FinFET performance parameters", In

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- N. Singh, S. Dehuri, Dhananjaya Tripathy, and Amiya Bhusan Sahoo, "Real Time Heart Beat Monitoring with LABVIEW", In proc: 19th OITS International Conference on Information Technology (OCIT), IEEE, pp. 10-13, March, 2022
- Monorama Swain, Bubai Maji, and Umasankar Das, "Convolutional Gated Recurrent Units (CGRU) for Emotion Recognition in Odia Language", In proc: 19th International Conference on Smart Technologies, IEEE, pp. 269-273, March, 2022
- Judhisthir Dash, "A Design Approach for Double-band Pass Filter using Functional-linked Cat Swarm Optimization Algorithm", In proc: 19th International Conference on Smart Technologies, IEEE, pp. 121-125, March, 2022
- 31. Rishabh Chauhan, S. Bandopadhaya, Mayank Dev, Annapurna Mishra, Lalat Indu Giri, Biplap Kharel, and Soumya Ranjan Samal, "Design of Robotic Snake with ESP 32 CAM and Arduino", In proc: 19th International Conference on Smart Technologies, IEEE, pp. 6-9, March, 2022
- 32. Ayusee Swain, K. P. Swain, Soumya Ranjan Samal, Sushant Kumar Pattnaik, Annapurna Mishra, J. K. Das, G. Palai, and S. Bandopadhaya, "Blockchain Powered Energy Monitoring System", In proc: 19th International Conference on Smart Technologies, IEEE, pp. 144-148 March, 2022
- 33. Kaustuva Chandra Dev, Sudhansu Shekhar Patra, **Suchismita Rout**, Sibananda Behera, Biswajit Sahoo, and Rabindra K. Barik, "Optimizing VM Allocation with Queue Dependent Requests in fog Network", In proc: International Conference on Emerging Smart Computing and Informatics (ESCI), IEEE, pp. 1-5, April, 2022
- 34. Ajit Kumar Behera, Mrutyunjaya Panda, Sarat Chandra Nayak, and Ch. Sanjeev Kumar Dash, "An Artificial Electric Field Algorithm and Artificial Neural Network-Based Hybrid Model for Software Reliability Prediction", In proc: International Conference on Computational Intelligence in Data Mining (ICCIDM 2021), Springer, pp. 271-279, May, 2022
- 35. A. Swain, K. P. Swain, Sushant Kumar Pattnaik, Soumya Ranjan Samal, and J. K. Das, "Cybersecurity in Digital Transformations", In proc: 4th International Conference on Intelligent Computing and Advances in Communication (ICAC 2021), Springer, pp 247–252, May, 2022
- 36. D. Jena, T. Dash, Sanghamitra Das, E. Mohapatra, J. Jena and S. Choudhury, "Simulation of Recessed Gate Pseudomorphic AlGaAs/InGaAs/GaAs HEMT for RF Applications", In proc: 6th International Conference on Devices, Circuits and Systems (ICDCS), IEEE, pp. 219-222, May, 2022
- 37. S. Misra, K. P. Swain, Sudhansu Mohan Biswal, S. K. Pati, and J. K. Das, "Analog/RF Performance Analysis of Downscaled Cylindrical Gate Junctionless Graded Channel MOSFET", In proc: Inteligent computing and advances in communications (ICAC 2021), Springer, pp. 101-108, May, 2022

- 38. Sarat Chandra Nayak, Ch. Sanjeev Kumar Dash, Ajit Kumar Behera, and Satchidananda Dehuri, "An Elitist Artificial-Electric-Field-Algorithm-Based Artificial Neural Network for Financial Time Series Forecasting", In proc: 2nd International Conference on Biologically Inspired Techniques in Many Criteria Decision Making, Springer, pp. 29-38, June, 2022
- 39. Pulak Sahoo, Ch. Sanjeev Kumar Dash, Satchidananda Dehuri, and J. R. Mohanty, "Complexity Classification of Object-oriented Projects Based on Class Model Information Using Quasi-opposition Rao Algorithm Based Neural Networks", In proc: 2nd International Conference on Biologically Inspired Techniques in Many-Criteria Decision Making (BITMDM-2021), Springer, pp. 141-150, June, 2022
- 40. Santi Kumari Behera, Julie Palei, **Dayal Kumar Behera**, Subhra Swetanisha, and Prabira Kumar Sethy, "Machine Learning-Based Diabetes Prediction Using Missing Value Impotency", In proc: 2nd International Conference on Biologically Inspired Techniques in Many Criteria Decision Making, Springer, pp. 575-584, June, 2022
- 41. **Ambarish G. Mohapatra, Pradyumna K. Tripathy**, M. Mohanty, and A. Khanna, "Fiber Bragg Grating (FBG) Sensor for the Monitoring of Cardiac Parameters in Healthcare Facilities", In proc: 2nd Doctoral Symposium on Computational Intelligence, Springer, pp. 711-719, 2022
- 42. Annapurna Mishra, Satchidananda Dehuri, and Pradeep Kumar Mallick, "Feature Extraction and Feature Sheet Preparation of Real-Time Fingerprints for Classification Application", In proc: Electronic Systems and Intelligent Computing (Proceedings of ESIC 2021), Springer, pp 71–83, June, 2022

Book Chapters Published

- 1. Anish Kumar Sarangi, **Ambarish Gajendra Mohapatra, Tarini Charan Mishra**, and Bright Keswani, "Healthcare 4.0: A Voyage of Fog Computing with IOT, Cloud Computing, Big Data, and Machine Learning", Fog Computing for Healthcare 4.0 Environments, Technical, Societal, and Future Implications, Springer, Chapter. 8, pp. 177-210, August, 2021
- 2. Anita Mohanty and Subrat Kumar Mohanty, "Impact of COVID-19 on Higher Education", COVID-19 and Education, Kunal Books, Chapter. 17, pp. 165-173, August, 2021
- 3. **Bhagyalaxmi Jena**, "Green Banking in India: A Study of Various Strategies Adopt by Banks for Sustainable Development", Banking System in India A Modern Perspective, Bharti Publications, New Delhi, Chapter. 15, pp. 178-190, August, 2021
- 4. Anita Mohanty, Subrat Kumar Mohanty, and Bhagyalaxmi Jena, "VANET-based Intelligent Traffic Light Control System by Detecting Congestion using Fuzzy C-means Clustering Technique in a Smart City", Internet of Things, CRC Press, Chapter. 1, pp. 1-18, September, 2021
- Bhagyalaxmi Jena, "Role and Importance of Women Entrepreneurship in India", Entrepreneurship Development and Management Opportunities, Challenges and the Way Forward, Bharti Publications, New Delhi, Chapter.10, pp. 104-115, September, 2021

- Anita Mohanty and Subrat Kumar Mohanty, "National Education Policy 2020-issues and Challenges", National Education Policy 2020 (ISBN No. -9789391908188), Kunal Publisher, Chapter. 32, pp. 254-257, October, 2021
- Bhagyalaxmi Jena, "National Education policy 2020 and higher education in india", National Education Policy 2020, Kunal publisher, New Delhi, Chapter. 28, pp. 227-231, November, 2021
- Samaleswari Prasad Nayak, Satyananda Champati Rai, and Biswajit Sahoo, "SAW: A realtime surveillance system at an agricultural warehouse using IoT", AI, Edge and IoT-based Smart Agriculture Intelligent Data-Centric Systems, Elsevier, Chapter. 18, Pages 315-327, February, 2022
- Anita Mohanty, Bhagyalaxmi Jena, and Subrat Kumar Mohanty, "Real Time Density based Traffic Congestion Detection System using Image Processing and Fuzzy Logic Controller", Advanced Sensing in Image Processing and IoT, CRC Press, Taylor & Francis, Chapter. 9, pp. 1-18, March, 2022

Books Published

1. **Mahendra P. Agasty** and Rabi N. Patra, "Internal Migration: A case study of Rural India", Abhijit Publicationsm ISBN: 978-93-92816-24-6, pp. 1-320, June, 2022

Participation in FDPs

- Nivedita Pati, Nibedita Swain, Priyanka Kar, Ipsita Pahi, and Lopamudra Mitra participated in the FDP on "Modern Trends of Research in Electrical Engineering-Its impact on Society and Future Aspects", NIT, West Bengal, 5th-10th July 2021
- Nivedita Pati, Nibedita Swain, Priyanka Kar, and Ipsita Pahi participated in the FDP on "Recent Trends in Power Electronics, Controllers and Power System", GMR Institute of Technology, Kakinada, 19th-23rd July 2021
- 3. Aditya Acharya, Amiya Bhusana Sahoo, Annapurna Mishra, Aradhana Raju, Bhagyalaxmi Jena, Biswajit Baral, Judhisthir Dash, Monorama Swain, Nihar Ranjan Panda, Sanghamitra Das, Pradipta Kumar Jena, Sanjit Kumar Swain, Soumya Ranjan Samal, Srikrishna Bardhan, Sudhansu Ku. Pati, Sushant Kumar Pattnaik, Satis Kumar Das, Utpal Das, and Amulya Ku. Roul participated in the Training session on IOT, SIT, Bhubaneswar, 20th -26th July 2021
- Saswati Jena participated in the FDP on "Universal Human Values (UHV)", AICTE, 26th -30th July 2021
- Nalini Singh participated in the FDP on "Precision Health Technology (FDPPHT-2021)", NIT, Jamshedpur, 4th -8th August 2021
- 6. Janmejay Senapati participated in the FDP on "Inculcating Universal Human Values in Technical Education", Turnip Innovations Pvt. Ltd, 8th August 2021

- Bikram Keshari Mishra participated in the AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Emerging Techniques and Applications in IoT", VSSUT, Burla, 9th-13th August 2021
- Manoranjan Behera participated in the FDP on "Occupational Health and Safety", NITTR, 6th -7th September 2021
- Pradyumna Kumar Tripathy and Ajit Kumar Behera participated in the AICTE-ISTE sponsored online FDP on "Recent Trends in Cloud Computing Phase III", DRIEMS Autonomous Engineering College, Cuttack, 6th -12th September, 2021.
- Narayan Nayak participated in the FDP on "Advanced Optimization techniques and hands on with MATLAB/SCILAB", Electronics & ICT Academies MNIT Jaipur, NIT Patna, IIITDM Jabalpur & IIT Guwahat, 6th-17th September 2021
- 11. Siba Sankar Nayak participated in the FDP on "Green Technology & Sustainibility", Bikaniry Technical Universit, 13th -17th September 2021
- Pradyumna Kumar Tripathy participated in the AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Data Science", MCKV Institute of Engineering, 20th-24th Sptember 2021
- Manoranjan Behera participated in the FDP on "Advances in Instrumental Techniques for Identification and Characterisation of Material" SOA University, Bhubaneswar, 20th-24th September 2021
- 14. Manoranjan Behera participated in the FDP on "Recent Trends in Educational Technology", OUAT, Bhubaneswar, 24th-28th September 2021
- 15. Jasaswi Prasad Mohanty and Pradyumna Kumar Tripathy participated in the FDP on "Application of Data Science & Analytics", XIM University, Bhubaneswar, 13th-17th December 2021
- 16. Swarupa Roy participated in the FDP on "Exposure Visit cum Training Programme (Mentor-Mentee Programme)", SIT, Bhubaneswar, 19th- 20th April 2022
- 17. Suchismita Rout participated in the Online AICTE Recognized FDP on "Nanotechnology enabled wireless communication and IOT (In Collaboration with GGU Bilaspur)", Applied Science Department, NITTTR, Chandigarh, 25th-29th April 2022
- Kumari Anamika participated in the Online FDP on "Spectroscopic Techniques & Instrumentation", NITTTR, Chandigarh, 23rd -27th May 2022

Participation in STTPs

- Ch. Sanjeev Kumar Dash, Kasturi Dhal, Pamela Chaudhury, and Suchismita Rout participated in the QIP Short Term Course on "Advanced Applications in Signal Processing and Artificial Intelligence, IIT, Bhubaneswar, 6th -10th July 2021.
- Subrat Kumar Sahu participated in the STTP on "Air, Noise And Odour Pollution: Control And Modelling", Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat, 19th -23rd July 2021

- Ch. Sanjeev Kumar Dash, and Pradyumna Kumar Tripathy participated in the STTP on "Applications of Artificial Intelligence, Machine Learning and Deep Learning in Science, Engineering and Management", Trident Academy of Technology, Bhubaneswar, 16th-21st August 2021
- Chittaranjan Mohapatra participated in Wipro Certified Faculty Training Program on "Java Full Stack Top Up", TalentNext, 13th - 24th June 2022
- Mahendra Prasad Agasty, Nibedita Swain, Sanghamitra Das, Sushant Pattnaik, and Sushri Samita Rout participated in the Innovation Ambassador training (Advanced Level), MoE's Innovation Cell & AICTE, 30th June - 30th July 2022

Participation in Workshops

- Janmejay Senapati participated in the Workshop on "Two-day workshop on the topic "Business Starter Docket", SIT Bhubaneswar, 3rd-4th July 2021
- Prakash Kumar Rout, Sudhanu Biswal, Nalini Singh, Dhananjay Tripathy, Narayan Nayak, Anita Mohanty, Biranchi N Rath, Debasish Nayak, and Ambarish Mohapatra participated in the Workshop on "Industrial Automation with LabVIEW & PLC (IALP-2121)", SIT, Bhubaneswar, 6th July 2021
- Soumya Priyadarsini Panda participated in the Two weeks virtual hands-on Summer School on "Development of Speech Recognition Systems for Indian Languages using Deep Learning and Open-Source Resources", IIT Dharwad, 19th- 30th July 2021.
- Rabi N. Mishra and Nibedita Swain participated in the global Workshop on "EV-Grid Integration: Opportunities, Challenges and Remedial Measures", PES India Chapters Council, in association with IEEE Standards Association, IEEE India Council and PES-IAS Chapter, Pune, 22nd -23rd July 2021
- Nivedita Pati, Nibedita Swain, Priyanka Kar, and Ipsita Pahi participated in the Workshop on "Advance MATLAB Tools and SIMULINK for Power System Application", SIT, Sambalpur, 26th -27th July 2021
- 6. Bipin Tripathy, Dharitri Moharatha, Debahuti Paikaray, Gitisudha Giri, Jayashree Das, Kamalakanta Satpathy, Manoranjan Behera, Manas Ranjan Singh, Siba Sankar Nayak, Susmita Biswal, Subrat Kumar Sahu, Subhashree Prusty, Swarupa Roy, and Tusar Parida participated in the Workshop on "FMET 2022", SIT, Bhubaneswar, 14th -17th March 2022
- Kamalakanta Satpathy participated in the Workshop on "Plasma Technology and Related Instrumentation for Monitoring and Control (SERB sponsored)", CSIR-IMMT, Bhubaneswar, 17th -18th May 2022

Participation in Seminars/Webinars/Conferences/Other Training Programs/Courses

 Rabi N Mishra participated in the seminar on "LVRT improvement and transient stability enhancement of power systems based on renewable energy resources using PSS, Recent advancements on active power control techniques", IEEE IES joint chapter Kolkata Section -Bhubaneswar subsection, 8th July 2021

- 2. Janmejay Senapati participated in National webinar on "Gender Equality", Synergy Institute of Engineering and Technology, Dhenkanal, 8th July 2021
- Rabi N Mishra participated in the seminar on "Hardware security, Energy storage and IoT", IEEE Kolkata Section Consumer Technology Society Chapter – Bhubaneswar, 9th July 2021
- Rabi N Mishra participated in the seminar on "Research interest in advanced distribution systems, Emerging protection challenges in microgrids and cooperative control of photovoltaic system", IEEE PES chapter Kolkata Section - Bhubaneswar subsection, 10th July 2021
- Nibedita Swain participated in the webinar on "Application of Artificial (AI) in Induction Motor (IM) Drive", MITS, Madanapalle, Chittor, 17th July 2021
- Nivedita Pati participated in the webinar on "Developing DC-DC Converter Control in Simulink", Mathswork, 20th July 2021
- Janmejay Senapati and Kamalakanta Satpathy participated in the webinar on "360 Feedback", AICTE, 26th July 2021
- Nibedita Swain, Priyanka Kar, Ipsita Pahi, and Lopamudra Mitra participated in the Talk on "Indium Gallium Nitride Quantum Well (Optoelectronics) Emitters", SIT, Bhubaneswar, 27th July 2021
- Janmejay Senapati participated in the webinar on "Ethical Leadership", Synergy Institute of Engg and Technology, Dhenkanal, 30th July 2021
- Ajit Kumar Behera, Pradyumna Kumar Tripathy, and Suchismta Rout participated in the International Webinar on "Document Preparation and Technical Writing using LaTex", DRIEMS Autonomous Engineering College, 30th July 2022
- 11. Pradyumna Kumar Tripathy participated in the webinar on "Artificial Intelligence Today & Tomorrow", Wiley Webinar Series, 10th August 2021
- 12. Janmejay Senapati and Rabi N Mishra participated in the seminar on "IPR: Key to India's Future Journey", Turnip Innovations, 14th August 2021
- Rabi N Mishra participated in the seminar on "Case studies on control and informatics for smart energy system", IEEE Industrial electronics society by Michael Short, 24th August 2021
- 14. Rabi N Mishra participated in the seminar on "How Easy it is to write a Project Proposal", AICTE-INAE-DVP scheme, 4th September 2021
- 15. Rabi N Mishra participated in the seminar on "Principle to Prototype", AICTE-INAE-DVP scheme, 6th September 2021
- 19. Kamalakanta Satpathy participated in the webinar on "Thermomechanical Modeling", COMSOL BV, 28th September 2021
- 20. Kamalakanta Satpathy participated in the webinar on "Modeling Biosensors with COMSOL Multiphysics", Germany, 30th September 2021

- 21. Samaleswari Prasad Nayak, completed the AWS Academy Educator Training on "AWS Academy Cloud Foundations", EduSkills, 13th November, 2021
- 22. Sweta Mohanty participated in the National Media Conclave on "Communication 4.0: Communication in a Digital Age", IMS, Utkal University, 21st-23rd November 2021
- 23. Ajit Kumar Behera participated (online mode) in the 6th International Conference on Computational Intelligence in Data Mining (ICCIDM-2021), Aditya Institute of Technology and Management (AITAM), AP, 11th 12th December 2021
- 24. Ajit Kumar Behera, Ch. Sanjeev Kumar Dash, and Pulak Sahoo participated in the 2nd International Conference on Biologically Inspired Techniques in Many-Criteria Decision Making (BITMDM-2021), Fakir Mohan University, Balasore, 20th - 21st December 2021
- 25. Sushri Samita Rout, participated (Online mode) in IP Awareness/Training program under National Intellectual Property Awareness Mission (NiPAM), Intellectual Property Office, India, 30th December 2021
- 26. Biranchi Narayan Rath participated in the Webinar on "AI research, applications on computer image, & Biomedical Instrumentation Research", Educare Taiwa with Yuan Ze University & National Chung Hsing University, 13th February 2022
- 27. Dhananjaya Tripathy participated in the Webinar on "Recent Advances in Emerging Electronics", 22nd -23rd February 2022
- 28. Subrat Kumar Sahu participated in the National seminar on "Sustainable Development with Women Empowerment", KIIT University, Bhubaneswar, 2nd-3rd March 2022
- 29. Siba Sankar Nayak participated in the Webinar on "NIPAM-22", Intellectual Property Office, India, 4th March 2022
- Debahuti Paikaray, Prayag Prasad Mishra, Subhakanta Dash, Susmita Biswal, Swarupa Roy, and Tusar Parida participated in the conference on "Analysis and Discrete Mathematics (OMS), Utkal University, Bhubaneswar, 26th -27th March 2022
- 31. Sudhansu Mohan Biswal, Ambarish G. Mohapatra, Prakash Rout, Anita Mohanty, Biranchi Narayan Rath, Nalini Singh, Debasish Nayak, Narayan Nayak, Dhananjay Tripathy, Biswajit Baral, Utpal Das, Utpal Kumar Das, Amiya Bhusan Sahoo, Sushant Pattnaik, and Debangana Das participated in the Webinar on "Design of a Regulated Constant Voltage Power Supply from a Variable Supply Input using a Physical PCB and IoT", SIT, Bhubaneswar on 28th March 2022
- 32. Kamalakanta Satpathy participated in the webinar on "Vulnerabilities in Federated Learning Networks Hydrodynamics of sediment transport: grain scale to continuum scale", INAE Bhubaneswar Chapter, 5th-7th April 2022.

Faculty Members Completed Certified NPTEL Courses

1. Ch. Sanjeev Kumar Dash completed NPTEL online Certificate Courses on "Data Base Management System", IIT Kharagpur, July- Sept 2021 (8-week)

- 2. Jasaswi Prasad Mohanty completed NPTEL online Certificate Courses on "Introduction to Machine Learning", IIT Kharagpur, July Sept 2021 (8-week)
- 3. Jasaswi Prasad Mohanty completed NPTEL online Certificate Courses on "Data Science for Engineers", IIT Kharagpur, July Sept 2021 (8-week)
- 4. Ch. Sanjeev Kumar Dash completed NPTEL online Certificate Courses on "Operating System Fundamentals", IIT Kharagpur, July- Oct 2021 (12-week)
- Subrat Kumar Sahu completed Certificate Courses on "Electronic Waste Management- Issues & Challenges", NPTEL, IIT Kanpur, 24th January-19th February 2022 (4-week)
- 6. Jasaswi Prasad Mohanty completed NPTEL online Certificate Courses on "Programming in Java", IIT Kharagpur, Jan-Apr 2022 (12-week)
- 7. Suvashree Suvadarshinee completed Certificate Courses on "Enhancing Soft Skills and Personality", NPTEL, IIT Kanpur, 21st February-15th April 2022 (8-week)
- 8. Kamalakanta Satpathy completed 5-week Certificate Courses on "Write Professional Emails in English", Georgia Tech, Coursera, 9th May 2022

Editor/Reviewer of Journals

The following faculty members are continuing as reviewers in different International Journals:

Faculty Name	Journal Name		
Ambarish G. Mohapatra	Computers and Electronics in Agriculture (Elsevier), Journal of Science and Technology (Springer), Agronomy (MDPI)		
Asif Uddin Khan	Future Generation Computer Systems (Elsevier), IJNS, National Chung Hsing University, Taiwan		
Jayashree Das	Journal of Alloys and Compounds (Elsevier)		
Kamalakanta Satpathy	Journal of Nuclear Science & Technology (Elsevier)		
Manoranjan Behera	International Nanoletters (Springer) Plasmonics (Springer), Iranian Ploymer Journal (Springer), Journal of Nanoparticle Research (Springer), Indian Journal of Applied Chemistry (Hindwai)		
Rabi Narayan MishraISA Transaction (Elsevier), Review of Scientific Instrume Renewable Power Generation (IET), International trans electrical energy systems (Wiley), IEEE Transactions on Electronics (IEEE), Engineering Applications of Artificial Intelligence (Elsevier), International Journal of Numeric Modelling (Wiley)			
Sanghamitra Das	IEEE Electron Device Letters		
Soumya Priyadarsini Panda	Transactions on Industrial Informatics (IEEE), IEEE Access, Speech Communication (Elsevier), International Journal of Speech Technology (Springer), Transactions on Asian and Low-Resource Language Information Processing (ACM)		

Faculty Name	Journal Name
Tapas Kumar Maji	IEEE Systems Journal (IEEE), Electric Power Components and Systems (Taylor & Francis), International Transactions on Electrical Energy Systems (Wiley)

Ph. D. Guidance (CSE/ MCA)

Faculty Name	Research Area(s)	Registered Guide in Universities	No. of Scholars Guiding/ Awarded
Asif Uddin Khan	Edge	KIIT University, SIT,	02
	Computing	Bhubaneswar	
Bijan Bihari Mishra	Data Mining, Soft Computing	VSSUT Burla, BPUT, KIIT University, SOA University	06
Ch. Sanjeev Kumar Dash	Data Mining	BPUT, SIT, Bhubaneswar	02
Dayal Kumar Behera	Machine Learning	KIIT University	01
Jasawasi Prasad Mohanty	NLP/Machine Learning	SIT, Bhubaneswar	01
Pamela Chaudhury	Data Mining	SIT, Bhubaneswar	01
Pradyumna Kumar Tripathy	Parallel Distributed System, Reliability Engineering, Image Processing	BPUT, SIT, Bhubaneswar	04
Rabindra Kumar Dalei	Mobile Computing, Cloud computing	SOA University, SIT, Bhubaneswar	04
Satyananda Champati Rai	Mobile Computing	BPUT, KIIT University, SOA University, Utkal University, SIT, Bhubaneswar	04
Soumya Priyadarsini Panda	Natural Language Processing	GIET, Gunupur, SIT, Bhubaneswar	02
Suchismita Rout	Wireless Sensor Network, Software Defined Networking	BPUT, SIT, Bhubaneswar	02
Sudarsan Padhy	Machine Learning, Computational Biology, Computational Finance, Parallel Algorithms, Finite Element Method, Computational Fluid Dynamics, Optimization	Utkal University, Ravenshaw University, KIIT University, SOA University, IIIT, Bhubaneswar and Centurian university of Technology and Management	07/01
Sushri Samita Rout	Computational Intelligence, Data Mining, and Internet of Things	BPUT	03

Ph. D. Guidance (ECE/ EIE/ EEE)

Faculty Name	Research Area(s)	Registered Guide in Universities	No. of Scholars Guiding/ Awarded
Aditya Acharya	Image Processing	BPUT, SIT, Bhubaneswar	03
Ambarish	Fiber Bragg Grating Sensors	BPUT, GIRT, SIT,	04
Gajendra		Bhubaneswar, University of	
Mohapatra		Technology, Jaypur	
Biswajit Baral	Semiconductor Device Simulation	SIT, Bhubaneswar	01
Biranchi Rath	Machine Learning	SIT, Bhubaneswar	01
Lopamudra Mitra	Renewable Energy Systems	BPUT	01
Prakash Kumar Rout		BPUT, NIT Rourkela	03
Rabi Narayan Mishra	Renewable Energy Systems	SIT, Bhubaneswar, NIT Rourkela	02
Sudhanshu Biswal	Semiconductor Device Simulation	SIT, Bhubaneswar, NIT, Goa	04
Sudhansu Kumar	Advanced Semiconductor	Jadavpur University, BPUT,	04
Pati	Device Modeling and Simulation	SIT, Bhubaneswar	
Sanjit Swain	Semiconductor Device Simulation	KIIT University, SIT, Bhubaneswar	02

Ph. D. Guidance (BSH)

Faculty Name	Research Area(s)	Registered Guide in Universities	No. of Scholars Guiding/ Awarded
Manoranjan	Nanomaterials: Synthesis &	CUTM, SIT, Bhubaneswar	04
Behera	Characterization		
Mahendra Prasad	Economics	KIIT University, GIET, SIT,	04
Agasty		Bhubaneswar	
Prayag Prasad Mishra	Delay Differential equations	BPUT	01
Tusar Parida	Fluid Mechanics	BPUT	01
Jayashree Das	Physics	SIT, Bhubaneswar	01
Saroj Kanta	Mathematics	SIT, Bhubaneswar	02
Mishra			
Saswati Jena	Psychology	SIT, Bhubaneswar	02
Bidyadhar Padhi	Accounting and Finance	SIT, Bhubaneswar	03
Manas Singh	Industrial Engineering, Soft computing	SIT, Bhubaneswar	02
Janmyejaya	Economics, Professional	SIT, Bhubaneswar	02
Senapati	Ethics & Human Values		
Suvashree	English	SIT, Bhubaneswar	01
Subhadarshinee			

Faculty Name	Research Area(s)	Registered Guide in Universities	No. of Scholars Guiding/ Awarded
Gitisudha Giri	Nanocomposite	SIT, Bhubaneswar	02

List of Patents Published

SI. No.	Patentee Names	Title of Invention	Date of Publication	Patent Application Number
1	Pradyumna Kumar Tripathy , Abu Sarwar Zamani, Nadim Rana, Sheshang Degadwala, Vijay Dattatray Chaudhari, Harish KGR	IoT based real time system and methodology for improvisation educational services using Machine Learning	31-12-2021	202131061 703
2	Biswajit Baral , Umakanta Nanda, Kiran Kumar Potnuru, Annapurna Mishra, Sudhansu Mohan Biswal , Sachin Kumar Rawani	Smart Management of Food Storage and Waste Reduction using Blockchain Technology	25-06-2021	202141026 736 A
3	Kaliprasanna Swain, Soumya Ranjan Samal, Annapurna Mishra, Tarini Charana Mishra , Rajiv Ranjan, Sanjay Kumar Sahu, Sangram Kishore Mohanty, Gopinath Palai, M.V.S.V. Prasad	Controlling of the Electrical System using Photonic Filters	20-08-2021	202111028 655
4	Beulah Jackson, Satish kumar Das, Khaja Mannanuddin, MV Mallikarjuna	A Surgical Tool for Robotic Nose Surgery	08-10-2021	347556-001
5	Subhashree Choudhury, Monalisa Mohanty, Taraprasanna Dash, Satyajit Mohanty, Sanghamitra Das , Bibhu Prasad Ganthia	Monitoring and Control of PV Systems Connected to the Grid with a Conventional Inverter and with an Interlaced Inverter	12-11-2021	202131048 431

SI. No.	Patentee Names	Title of Invention	Date of Publication	Patent Application Number
	Taraprasanna Dash, Sanghamitra Das , Eleena Mohapatra, Aradhana Raju, Purnendu Mishra, Subhashree Choudhury, Bibhu Prasad Ganthia	Monitoring and Evaluating the Operation of Electronic Noses	10-12-2021	202131050 907
6	Narahari Dudiki, B Priyanka, Annapurna Mishra, Pradipta kumar Jena, D. Antony Arul Raj, D. Seethalakshmi, Prabuddha Giri, B Rupa Devi, Karthikeyan, V. Nirmala, Vikas Tripathi, Sathishkumar J	Deep Learning Approach to Provide a Vulnerable Framework for Safeguarding the Data's that are Transferred Over Cloud Along with Cyber Security	13-05-2022	202241023 064
7	Sushant kumar Pattnaik, Mithilesh kumar Pandey, Aasim Mir, B. Vinodhini, Navaneet Deshpande, Kaushal Rana, Bipin kumar Srivastava, A. Senthilrajan, Pullcherla Siba Prasad, B. Premagowri	IoT and Deep Learning based Food Image Recognition and Food Safety Detection Methods using Machine Learning Techniques	10-06-2022	202231027 209

Sponsored/ Consultancy Projects

- Dr. Biranchi Narayan Rath (Sr. Assistant Professor, EIE) has received a grant of RS 15 lakhs under the Teachers Associateship for Research Excellence (TARE), Science and Engineering Research Board (SERB), Government of India to carry out research in the area of active noise control. The project is titled as 'Discrete-Point Control Based Adaptive Active Noise Regulation System Implementation Using Deep-Learning Regression Techniques'
- The Power Electronics and Systems Research & Consultancy Group at SiliconTech, bagged a project entitled 'Integrated Network Planning and System Study' for Gangadhar Meher Lift Irrigation Project, Bijepur in the Sambalpur district, under the Department of Water Resources, Government of Odisha. This research group is headed by Prof. (Dr.) Rama Prasad Panda, from the Department of Electrical & Electronics Engineering

Awards Received by Faculty Members

- Satish Kumar Das (Assistant Professor, ECE) was awarded the 'Best Young Faculty Award' on 30th August 2021 by Novel Research Academy, Puducherry, India during the academic year 2021-22 for his academic contribution in Science and Technology under the category of 'Electronics and Communication Engineering' specialization
- Bhagyalaxmi Jena (Sr. Assistant Professor, ECE) was awarded the 'Best Women Faculty Award' on 22nd September 2021 by Novel Research Academy, Puducherry during the academic year 2021-22 for her academic contribution in Science and Technology under the category of 'Electronics and Communication Engineering' specialization

- Pradyumna Kumar Tripathy (Associate Professor, CSE) received the National level "ISTE Rajlaxmi Memorial Best Engineering College Teacher Award for Odisha State for the Year 2020" on 5th October 2021, given by ISTE (Indian Society for Technical Education), New Delhi on its 50th Annual Convocation Award Function at Y. B. Chavan Center, Mumbai, Maharashtra
- Bhagyalaxmi Jena (Sr. Assistant Professor, ECE) has received the 'National Best Researcher Award 2021' in recognition of her consistent performance in 'Signal Processing' conferred by the International Multidisciplinary Research Foundation on 11th November 2021

Faculty Members as Resource Person/ External Experts

- Rabi Narayan Mishra (Associate Professor, EEE) served as a resource person in the Webinar on "NN-Predictive Intelligence-based DTFC for induction motor drive", Joint chapter IEEE IES Kolkata section and Bhubaneswar subsection on 8th July 2021
- Rabi Narayan Mishra (Associate Professor, EEE) served as a resource person in the Webinar on "Application of Artificial Intelligence in Induction Motor Drive", ept. of EEE, Madanapalle Institute of Technology and Science (MITS), A.P in association with ISTE Student Chapter, 17th July 2021
- Ambarish G. Mohapatra served as a keynote speaker in the Webinar/Workshop on "Internet of Things and its related areas", Maharaja Agrasen Institute of Technology in collaboration with IEEE ComSoc Delhi Chapter, 16th-27th August 2021
- Rabi Narayan Mishra (Associate Professor, EEE) served as a keynote speaker in the Webinar on "Neural Predictive Intelligence Technique in Drive Systems", Organized by Department of EEE (ITER), Siksha 'O', Anusandhan (Deemed to be University), Bhubaneswar, Odisha, India, 6th November 2021
- Rabi Narayan Mishra (Associate Professor, EEE) served as a keynote speaker in the Webinar on "Application of Predictive Intelligence Technique in Drive Systems", Organized by Department of EEE (ITER), Siksha 'O', Anusandhan (Deemed to be University), Bhubaneswar, Odisha, India, 25th November 2021
- Pradyumna Kumar Tripathy (Assoc. Professor, CSE) has contributed as the session chair of Session-05, Track: Networking and Information Security (NIS)-I on 17th December 2021 in the 19th OITS International Conference on Information Technology (OCIT 2021) held during 16th to 18th December 2021 at SIT, Bhubaneswar
- Debasmita Pradhan (Sr. Asst. Prof., CSE) has contributed as the session chair of Session-07, Track: Artificial Intelligence, Machine Learning and Deep Learning (AMD) on 17th December 2021 in the 19th OITS International Conference on Information Technology (OCIT 2021) held during 16th to 18th December 2021 at SIT, Bhubaneswar
- Satyananda Champati Rai (Professor, CSE) has contributed as the session chair of Session-09, Track: Artificial Intelligence, Machine Learning and Deep Learning (AMD), on 18th December 2021 in the 19th OITS International Conference on Information Technology (OCIT 2021) held during 16th to 18th December 2021 at SIT, Bhubaneswar
- Pradyumna Kumar Tripathy (Assoc. Professor, CSE) has served as a session chair at the 1st Ph.D. Research Symposium in conjunction with the 18th ICDCIT-2022, held during 19th to 23rd January 2022 organized by the School of Computer Engineering, KIIT Deemed to be University, Bhubaneswar, India

- Saswati Jena (Assistant Professor, BSH) was invited to speak at RIE (Regional Institute of Education), NCERT on "Relationship between knowledge, skills and application" on 24th and 25th January 2022 and on "Understanding Myself and my Mental health" on 7th February 2022
- Ramaprasad Panda (Associate Professor, EEE) delivered a talk on "Solving Industry Problems through Academics" at the SOA weekly Academic Lecture on 12th February 2022, organized by the Department of Electrical and Electronics Engineering at ITER, Siksha O Anusandhan (Deemed to be University), Bhubaneswar
- Saswati Jena (Assistant Professor, BSH) was invited to speak at Paricharcha, an event hosted by MANODARPAN-an initiative of the Ministry of Education (MoE, Govt of India), about 'Prevention of substance abuse among adolescents in school' on 18th February 2022
- Manoranjan Behera (Additional Professor, BSH) spoke about 'Green Synthesis and Characterization of Nanoparticles' in the National Webinar on Application of Advanced Sciences in Modern Technology and Industrial Engineering held at COEB (College of Engineering, Bhubaneswar) on 13th May 2022
- Saswati Jena (Assistant Professor, BSH) served as a resource person in the event 'Evaluation of the assignments of trainee counsellors of the DCGC programme of NCERT, New Delhi', held at Regional Institute of Education (RIE), Bhubaneswar on 6th June 2022

International Conferences Organized

OITS International Conference on Information Technology (OCIT) 2021

The Department of Computer Science and Engineering in partnership with Odisha Information Technology Society (OITS), organized the 19th OITS International Conference on Information Technology (OCIT 2021) at Silicon Institute of Technology, Bhubaneswar from 16^t - 18th December 2021. The event was inaugurated by Chief Guest Mr. Ashok Kumar Basa, a well-known structural engineer of India, Guest of Honor Dr. S. Basu, Director, IMMT Bhubaneswar and an engineer of international repute, General Chair, Prof. S. Padhy, Program Chair, Dr. Niranjan Kumar Ray along with our Principal, Prof. Jaideep Talukdar, and our Dean Research, Prof. Jayashree Das, Professor Saraju P. Mohanty from University of North Texas, USA, Professor Baek-Young Choi from University of Missouri-Kansas City (UMKC), USA, Professor Srinivas Katkoori from University of South Florida (USF), USA, Dr. R. Nagaraja, Founder and Director of PRDC Bengaluru, India, Professor Mukesh Mohania from IIIT Delhi, India, and Mr. Satendra Singh, Chief Technology Officer of Propelld, Bengaluru were the eminent keynote speakers. A number of eminent academicians, computer scientists, professionals, software designers and developers attended the conference. The event





took place in hybrid mode (online and offline), with 300 active participants. It was a huge success, with more than 90 paper presentation, participants and delegates expressing great appreciation.

Workshop/ FDP/ STTP/Seminars Organized

Workshop on Industrial Automation with LabVIEW and PLC

The Department of Electronics & Instrumentation Engineering (E&IE) and Department of Electronics & Communication Engineering (ECE) organized a workshop on "Industrial Automation with LabVIEW and PLC (IALP-2121)" on 5th July 2021 at Silicon Institute of Technology, Bhubaneswar. The goal of the workshop was to familiarize the technologies in the domain of virtual Instrumentation and Control methodologies. There were 61 participants attended the program. Er. Aniruddh K Goutam from Enggimatix Solutions Pvt. Ltd. Noida and Er. Rahul Dixit from AKGEC Skills Foundation were the resource persons for the workshop.

Workshop on Nanotechnology and Embedded Systems (NES-2021)

The Department of Electronics & Communication Engineering (ECE) organized a 3-day online workshop on Nanotechnology and Embedded Systems (NES-2021) from 16th to 18th December 2021, in collaboration with Sevya Multimedia Technologies, Greater Noida. The Key invited speakers for the workshop were Mr. Puneet Mittal from VLSI Experts Pvt. Ltd., Mr. Alok Kumar Mishra and Mr. Praveena Gowda from Micron, Mr. Jean-Francois from Sevya Multimedia, Dr. Siddhartha Dhar, Ms. Namerita Khanna and Mr. Atul Bhargava from ST Micron. NES 2021 provided a direct exposure to the VLSI Industry and experts which helped our students in doing in-house projects and getting placement/internship offers in different VLSI firms like Sevya Multimedia and ST Microelectronics, VLSI Experts Pvt. Ltd. Over 200 participants joined the event in both online and offline mode, from both industry and academia.





STTP on Industry Automation and Control for Industry 4.0 (IACI 2021)

The Department of Electronics and Instrumentation Engineering (E&IE) organized a 5-day Short-Term Training Program (STTP) on Industry Automation and Control for Industry 4.0 (IACI-2021) from 20th to 24th December 2021 in hybrid mode. IACI-2021 featured sessions led by industry experts, with participants learning about cutting edge industrial automation technologies related to Programmable Logic Controller (PLC), Distributed Control System (DCS), and Supervisory Control and Data Acquisition (SCADA). About 260 participants from various institutions all over India joined the STTP and gained knowledge on Industry 4.0.





FDP on Crucial Accountability & Stakeholder Communication

A FDP on "Crucial Accountability and Stakeholder Communication" was organized on 8th January 2022 for the faculty members and officers in the Presentation Hall. Mr. V Narasimhan, Head-Learning & Development, Sundaram Learning, Chennai, was the facilitator for the session. The program was divided into two sessions- forenoon and afternoon sessions. The objective of the forenoon session was to support the participants to strengthen their sense of accountability for an enhanced performance at their workplace and personal life, help them make accountability conversations, make them aware of the drivers and barriers for strengthening accountability and help them build an action plan for developing accountability in their own sphere of influence. The objective of the afternoon session was to make the participants aware about NVC (Nonviolent Communication), prioritize connection over correction, choosing empathy as the first response in communication, moving from conflicts to collaboration by using the four components of NVC framework, help them devise a personal action plan for applying the NVC framework and achieve better results with stakeholders. Around 35 faculty members attended the FDP.

Workshop on Functional Materials for Emerging Technology (FMET 2022)

The series of national workshop on "Functional Materials for Emerging Technology; (FMET)" which was started in 2019 by the BSH department, conducted its 4th event during 14th - 17th March 2022 in the hybrid mode. There were 223 candidates registered for the event, with an average of 120-130 attended the event on each day. During the session, two talks were arranged in the forenoon on each day. Eminent researchers /scientists including three



international speakers of repute were invited for the event. The speakers were Prof. S.D. Mahanti, Michigan State University, USA.; Prof. Sachin Sarangi, IOP, Bhubaneswar.; Prof. Purusottam Jena, Virginia Commonwealth University, USA; Prof. Dillip Kumar Mishra, SOA University; Prof. Prakash Patnaik, National Research Council, Canada; Prof. Prasanna Kumar Sahoo, IIT, Kharagpur; Prof. Pratap Sahoo, NISER, Bhubaneswar and Dr. M. Ghanshyam Krishnan, University of Hyderabad.

STTP on Recent Trends in Electric Vehicle Technology (RTEVT 2022)

A 3-day online Short-Term Training Programme on Recent Trends in Electric Vehicle Technology was organized by Department of Electrical and Electronics Engineering in association with IEEE Bhubaneswar sub-section PES and IES Chapter from 15th to 17th March 2022. With an objective to explore the scope, inculcate interest and improve research on electric/ hybrid vehicles in India, this STTP was conducted. The first talk was delivered by Mr. Nanda Kishore Panda, Research Scholar from Delft University, Netherlands on the topic 'Electric Vehicles-A Bane or Boon to the Grid's Infrastructure'. The post lunch session began with a talk by Dr. Dipankar Debnath from IIT Kharagpur on the topic 'Introduction to EV and its Power Converter Requirement'. The day-2 session began with the talk by Dr. Chandrasekhar Atla from PRDC, Bengaluru on the topic 'Grid Balancing with e-Mobility'. Dr. Riesh Keshri from VNIT, Nagpur talked on the topic 'Electric Vehicle Charging and Grid Interaction' in the post lunch session. The last day began with a talk by Dr. P. Chandrasekhar from IIT Bhubaneswar on the topic 'Electric Vehicle Topologies and their Control'. A total of 124 participants participated which includes participants from academic institutions, industries from Odisha as well as outside Odisha like NIT Meghalaya, NIT Warangal, VIT, Woosong University, South Korea, Puducherry Technological University, Puducherry, TPCODL, WIPRO etc.

Invited Talk on High Performance Computing

The Department of Computer Science and Engineering (CSE) organized an invited talk on "High Performance Computing and AI for All", by eminent Prof. Dhabaleswar K. Panda, Faculty Chair, Ohio State University, USA on 22nd March 2022. The objective of the talk was to disseminate knowledge regarding the integration of Supercomputers with Exabyte Computational Capability, integrated with ML/DL (Machine Learning/ Deep Learning). The talk was followed by an insightful Q/A session regarding technological advancements and opportunities for higher studies at Ohio State University.

Webinar on skills in Power Supply Design

The Department of Electronics & Instrumentation Engineering (EIE) organized a webinar on 'Design of a Regulated Constant Voltage Power Supply from a Variable Supply Input using a Physical PCB and IoT (DRVSPI 2022)' on 28th March 2022 in the hybrid mode to familiarize participants with the latest technologies. Mr. Mukesh Singh, co- founder and trainer of Robogenesis, Bhubaneswar, conducted the session.

National Seminar on Renewable Energy Technology

The Department of EEE in association with Indian Energy Congress organized a National Seminar on Renewable Energy: Perspectives & Future challenges for a Green World on 14th May 2022. The Inaugural Session was attended by senior engineers and IAS officers. Prof. Ashok Tripathy, Prof Chandan Kumar Chand (IIEST, Sibpur), Dr. Ramaprasad Panda, Dr. C N Bhende (IIT, BBSR), Dr. Priyabrata Patnaik (Secretary OERC) and Dr. Srinivas Bhaskar Karanki were the technical speakers.





Workshops/Seminars/Other Events Organized for Students Hello World by ISTE Silicon Students' Chapter

The ISTE Silicon Students' Chapter conducted 'Hello World' for the students of the 3rd semester on 20 Nov 2021, where seniors discussed important topics like placement roadmap, interview tips and basics of programming. A short quiz session was conducted on the basics of programming. The top 5 performers were Kumar Mrityunjay–ECE (2nd year), Atul Kumar – CSE (2nd year), Anurag Mishra – CEN (2nd year), Sujeet Kumar Rath– CST (2nd year) and Ankita Verma– CSE (2nd year)

Webinar by Raj Jha (CSE, 2019)

Raj Jha, a SiliconTech alumnus (CSE, 2019), conducted a webinar on 'Key to Cracking GATE' on 22 January 2022. The webinar aimed to increase students' awareness of GATE preparation and guide them to find the right expert to help them crack the exam. Raj had secured AIR 222 in GATE CSE 2020. He had received the BPUT Gold Medal for being the CSE branch topper (Batch 2015-2019) of the University. He also received the 'Arjun Bhuyan Gold Medal for Best Graduate' from BPUT. Currently, he is pursuing his MTech at IISc Bangalore.

Quiz by Quiz Club

Silicon Quiz Club organized the "Silicon Quiz Fest -2022" on 12th and 13th March 2022. The first event of the Silicon Quiz Fest was Quizient- The Sports and Entertainment Quiz conducted by Toyada Pattnaik (Infosys) on the 12th March 2022. The registration for the event began at 9 am and the prelims started around 10:00 am. Participants from all around India attended the 20 question prelims. After evaluation of the 35 teams (18 teams from Silicon and remaining teams from outside) present in the Quiz, eight teams reached the finals. In the 2-hour finals, eventually three times battled it out for podium finishes. The winners of the quiz were: Piyush Kedia (IIT Kharagpur) and Samanway Banerjee (ProQuizzin League), Siddharth Mishra (NMIMS) and Saransh Mohapatra (Infosys), Debjit Tripathy (EXL) and Manish Pradhan (Oracle).

Aurabinda Misra Memorial Quiz

Silicon Quiz Club organized the "Aurabinda Misra Memorial Quiz" every year in the memory of our beloved faculty Late Mr. Aurabinda Mishra who was the HOD of MCA department in the Silicon Institute of Technology. He was himself a quizzer and was acknowledged as the best sports quizzer in

the Bhubaneswar circuit. This year, as part of the Silicon Quiz Fest, the "Aurobinda Mishra Memorial Quiz 2022" was organized by the Silicon Quiz Club on 13th March 2022. The event registration started at 9.00 AM and the Prelims of the General Quiz started at 10.30 AM. The prelims round consisted of 20 questions, conducted by the quizmaster Mr. Alankar Devta, from Delloitte. After evaluation of the 35 teams (19 teams from Silicon and remaining teams from outside) present in the Quiz from all across India, eight teams reached the finals. In the finals, 30 questions were asked and based on the performances the winners were selected. The winners were as follows:

Piyush Kedia (IIT Kharagpur) and Samanway Banerjee (ProQuizzin League) Adarsh Mohapatra (AIIMS, Bhubaneswar) and Baibaswata B. Jena (IIT Bombay) Siddharth Mishra (NMIMS) and Saransh Mohapatra (Infosys)

Selection for SIH 2022

The smart India Hackathon (SIH) 2022 was announced on 11th January 2022. As part of the selection process, an institute has to conduct an internal Hackathon and is to select 7 teams. The 7 selected teams would comprise of 5 software teams (including one student innovation) and 2 hardware teams. The Institute organized its Internal Hackathon on 26th March 2022. 21 teams comprising of



126 students took part in it, in both software and hardware categories. Out of the 21 teams 18 teams had ideas for the software edition of SIH and 3 teams were for the Hardware edition. Mr. K. M. Rajan (Sr. Manager, CTTC Bhubaneswar), Dr. Suraj Sharma (Asst Prof, IIIT Bhubaneswar), Mr. Shailendra Upadhyay (CEO, Cozentus), Mr. G Vamsi Krishna (Solution Architect, Phonics Robotics, Bhubaneswar) were the external jury and Dr. Pradyumna Kumar Tripathi, Dr Saroj Rout, Prof. Bhawani Shankar Pattnaik were the internal jury for the software and hardware version.

Hack Overflow 2022

The SWITCH club, under the Student Innovation & Promotion Cell (SIPC), organized the Hack Overflow-2022 (Software Edition) event at our campus on 27th March 2022 (Sunday: 8:00 AM - 8:00 PM). The objective of the event was to develop the culture of innovation and problem-solving skills, using coding and further establish the culture of effective collaboration, and creativeness among the students. Twenty-five teams, including 92 students from 2nd/3rd year B.Tech., participated in the event. The teams were evaluated in 3 rounds on the basis of idea type, progresses made, novelty of the work and were evaluated by a panel of judges comprising of Dr. Pulak Sahoo, Dr. Soumya P. Panda, Mr. Saurav Jha, Associate Software Engineer, Mindfire Solutions, Bhubaneswar (President & Ex-Secretary of SWITCH), and external expert-Mr. Dipankar Rath, Industry Principal, Infosys, Bhubaneswar. 3 top teams were selected based on their innovation, implementation completed, practicality and presentation. Team Entity with members: Swaugat Beura, M. Pratik Kumar, Rudra Prakash Behera and Soumya Prakash Sahu (3rd year, B.Tech.) was selected as the winner and

awarded with a cash prize of Rs 10,000. Team Devloopers with members: K. Nirmal Kumar, Abinash Samantray and Shweta Dash (2nd year, B.Tech.) was selected as 1st Runners Up (awarded with a cash prize of Rs. 7,000) and Team Leadswing with members: Manas Ranjan Padhy, Sujeet Kumar Rath, Nakkina Baba Sai and Debasish Panda (2nd year, B.Tech.) was selected as 2nd Runners Up (awarded with a cash prize of Rs. 5000).





Energy Conservation Awareness Program

The EEE department of the Institute in collaboration with the Petroleum Conservation Research Association (PCRA) and IEEE students' chapter conducted an awareness program on Energy Conservation and ISO 50001:2018 EnMs on 31st March 2022. PCRA is a non-profit organization under the aegis of the Ministry of Petroleum & Natural Gas, Government of India. The speaker for the program was Mr. Sribatsa Panda, EX DGM, Business Excellence, SAIL, Bokaro Steel Plant, presently working as an External Faculty (Industry) of PCRA. The speaker was outstanding in his effort in imparting awareness in the students on energy usage as national perspective, conservation, and preservation of energy in different stages to combat the climate change effects. The impact on society, environment and the future of socio-political relationship of the countries from energy perspective is very well captured in his talk. There were 90 participants.

Bootcamp on Basics of Web Development

The D2C (Dare2Compete) Igniters Student Chapter organized a beginner's bootcamp on Basics of Web Development from 31st March to 3rd April 2022. The bootcamp covered various interesting areas like basics of HTML, CSS, JavaScript, Bootstrap and the initial stages of developing a website. It was followed by a mini hackathon.

CodeClash 3.0

The ISTE and CodeChef Students' Chapters at SiliconTech jointly conducted CodeClash 3.0 on 16th and 17th April 2022. This coding competition was conducted on the CodeChef platform. Around 272 students participated in this event. Ashish Kumar Singh (CSE, 1st year) and Kumar Jijnasu (CSE, 2nd year) emerged as the winners while Bhibu Prasad Sahoo (CEN, 1st year) and Abinash Samal (CSE, 2nd year) became the runners- up.

NIRMAN

The Circuit club and Robotics club under SIPC organized 'NIRMAN', a one of its kind technological event, from 28th April 2022 to 30th April 2022. Dr. Ashok Kumar Badmali, founder & CEO Inofonity Pvt. Ltd. graced the event as the Chief Guist. The three days events comprised various events like Robotics-Line follower, Roborace, Idea presentation and Hacknathon. The event witnessed an

overwhelming response as students from various institutes turned up to ideate and innovate. Winners are awarded with cash prize up to 1 Lakh.





Strike the Placements with Striver

The SWITCH club under the Student Innovation & Promotion Cell (SIPC), organized an expert talk session- "Strike the Placements with Striver" on 8th June 2022 at the Institute Auditorium. The objective of the session was to motivate and provide guidance to our students to start their preparations for the product-based companies. The session was conducted by Mr. Raj Vikramaditya (also known as Striver), currently working as a Software Engineer at Google. Mr. Raj also worked with elite companies like Media.net and Amazon and was one of the top instructors in Unacademy and GeeksforGeeks. His YouTube channels - Striver (76.5K subscribers) and TakeUForward (197K subscribers) provides extensive content on competitive coding and problem solving for placements.



The speaker started the session by sharing his experience in placements and further discussed the hiring processes and preparation strategies for the FAANG companies (Facebook, Amazon, Apple, Netflix, and Google). There were more than 350 B.Tech. and MCA students from the 1st, 2nd, and 3rd year who participated in the session with great interest.

Skill Project Competition of ECE:

The Dept. of Electronics and Communication Engineering organized the skill lab-based project competition for 6th semester ECE students on 8th June 2022 in DSP Lab and Emerging Tech lab, with an objective to encourage student to showcase their Hands-on technical skills. More than 70 students participated in the event. The competition had three tracks, namely (1) Design of Digital Display System, (2) Design of a Power Supply System and (3) Implementation of a Home Automation System. An amount of rupees 18000/- was distributed to the winners of all tracks. The list of students who received prizes is as given below.

Design of Digital Display System

1 st Prize:	Rudra Narayan Sahu, Swaraj Kumar Gupta - ECE A2
2 nd Prize:	Soumyadeep Shit, Swagat Subhankar – ECE B2
3 rd Prize:	P Sumant, M M Prava Sahoo, Ayaskanta Nayak, Amrit Biswal – ECE B 1
3 rd Prize:	Erica Bannerjee, Boni Kumar Jagadala – ECE A1
Design of a Pov	ver Supply System
1 st Prize:	Mahaprasad Das, Ballabi Panda, Puneet Jena, Deepali Mahapatra – ECE B1
2 nd Prize:	Geetansa, Aayusee Samantaray – ECE A2
Implementatio	n of a Home Automation System
1 st Prize:	Papun Kumar Jena, Soubhagya Nayak – ECE C1
2 nd Prize:	Adiyua Sahu, Barsha Parida – ECE B1
3 rd Prize:	Baibhav Bishal Pani, Pritam Kumar giri – ECE A2

Summer Internship Programme-2022

Summer Internship-2022 for 2nd and 3rd Year students, 27th June - 30th July 2022

SI. No.	Name of Course	No. of Students
1	Applied Machine Learning using Python	30
2	Digital CMOS VLSI Design and Verification: Verilog HDL and Full- Custom Approach	107
3	Specialized Training on Power System Analysis through Hands-On Practice	23
4	Full Stack Development with Django Framework (4 th sem)	99
5	Full Stack Development with Django Framework (6 th sem)	115
6	Developing Smart Applications using IoT and AI Cloud Assistant	51
7	Advanced Java & J2EE	18
8	Cyber Security	31
9	SEO & Digital Marketing	28
10	MERN Stack (4 th sem)	121
11	MERN Stack (6 th sem)	84
12	MEAN Stack Programming	21
13	Problem Solving and Programming with Python	21
14	AWS, Machine Learning using Python (Data Science)	32
15	Problem Solving Using Data Structures & Algorithms	55
16	AWS Master	60
17	Azure Master's Training	25
	Total No. of Students	921

Summer Internship-2022 for 1st Year Students

SI. No.	Name of Course	No. of Students
1	VLSI for Beginners	33
2	Foundational Course on Machine Learning using Python	89
3	AWS Master's Training	139
4	Java Programming	27
5	SEO & Digital Marketing	33
6	Dotnet Web Application Development	20

SI.	Name of Course	No. of
No.	Name of Course	Students
7	Python for Beginners	121
8	Full Stack PHP	80
9	Problem Solving and Programming with C and Data Structure	70
10	Data Analytics	39
	Total No. of Students	651

Campus Placement 2021-22

During the AY 2021-22, 52 companies visited the campus for placement. A total of 1080 jobs were offered to B.Tech. students, 135 to MCA students, and 18 to MSC DS students. The major recruiters were Accenture Adv-ASE, Accenture ASE, Capgemini, DXC, IBM, Infosys, Legato, LTTS, TCS Ninja, Wipro ETN, Wipro NTH. The overall placement figures for 2021-22 are:

Branch	Total Students	Students Placed	Job offers	Success % on Total
CSE	197	186	570	94.42
ECE	151	135	303	89.4
EEE	93	79	184	84.95
EIE	15	12	23	80
Total	456	412	1080	90.35
MCA	90	76	135	84.44
MSc (DS)	16	13	18	81.25
Total	562	501	1233	89.15

Overall Placement Figures for 2021-22:

Company Wise Placement (2022 Pass out Batch)							
Company		Branch					
Company	CSE	ECE	EEE	EIE	MCA	MSC	Total
						DS	
Accenture Adv-ASE	20	13	3	1	2		37
Accenture ASE	38	35	15	4	19		92
Accesocloud	2	1			6		3
Accolite	6		1				7
Adani			1				1
ALLD Technology	8						8
Amazon	1						1
Aptus DataLabs	3	1					4
Bourntec					2		
Capgemini	67	30	17	1	8		115
Capillary	1						1
Cognizant GenC	2	1	1				4
Cognizant GenC-Elevate	15	5	1		2	2	21
Cognizant GenC-Next	7	1					8
CoreEL		1					1

Company Wi	Company Wise Placement (2022 Pass out Batch)						
Company Branch						Grand	
Cozentus	3	3	1	5	5		12
Date The Ramp	3	1	1		1		5
Digit General Insurance	3	2					5
DXC	58	30	33	3			124
eClerx		1	1		1	2	2
ESSPL					1	5	
Haber					3		
HackwithInfy	7	1	1				9
HashedIn			1				1
HCL		1					1
Hexaware	4	7	2		2		13
IBM					5	1	6
Incture					3		3
Infosys					10		10
Interland					8		8
INVINCIX					1		1
iServeU					2	1	3
Kelton Tech					2		2
Mindtree					3		3
Naggaro					3		3
Nirmalya Labs					5		5
ODISOFT					2		2
OnePaper					1		1
Pipli					1		1
PwC					2		2
Quest Global					2		2
RapidSoft					3	1	4
South Indian Bank						1	1
Spikewell					1		1
STL					4		4
Tata ELXSI					4		4
TATA Power					6	1	7
TCS Digital					1		1
TCS Ninja					1		1
Tech Mahindra					4	2	6
Teleglobal International					3		3
TetraSoft						2	2

Higher Salary 2022

Higher Salary	33 LPA	25 LPA	20 LPA	14LPA	13 LPA	11 LPA	8 LPA	7 LPA	6-7 LPA	5-6 LPA	4-5 LPA
No. of Students	1	1	1	1	1	2	24	25	119	87	636

Practice School:

During the AY 2021-22, 28 students joined the practice school program in 7th semester and 100 students joined the practice school program in their 8th semester.

Achievements by Students

GATE-2022 ACHIEVEIS						
SI. No.	Branch	Regd. No.	Name	AIR		
1	CSE	1901209180	Smrutiranjan Dalai	720		
2	CSE	1901209057	Deepshikha Swain	1278		
3	ECE	1801209007	Abhinab Das	1487		
4	CSE	1901209176	Digbijayee Nayak	2799		
5	EEE	1801209485	Vivek Vishal	6800		
6	CSE	1901209009	Aditya Narayan	8571		

GATE-2022 Achievers

CAT-2021-22 Achievers

SI.				
No.	Branch	Regd No.	Name	Percentile
1	EEE	1801209170	Dibyarupa Jena	88.4
2	CSE	1801209234	Mudrika Khemka	86.35
3	EEE	1801209264	Pavneet Gill	80.2
4	CSE	1801209395	Smita Agarwal	77.36
5	ECE	1801209003	A V S Chandra Sekhar	74.73
6	CSE	1801209277	Prateek Smith Patra	73.07
7	ECE	1801209154	Debashree Jena	58.06
8	CSE	1801209212	Lipsa Behera	48.63

BPUT Gold Medals for 2016 & 2017 Admission Batches

SI No.	Branch	Regd. No.	Name	CGPA	Award Details
1	ECE	1601209526	Rucha Pattnaik	9.43	Gold Medal as Branch
2	AEI	1701209449	Satabdi Panda	9.07	Topper
3	CSE	1701209161	Swikruti Mohapatra	9.43	Topper
4	EEE	1701209355	Abhishek Lohia	9.31	
5	CSE	1701209161	Swikruti Mohapatra	9.43	Arjun Bhuyan Award for University Topper

Achievements during Vigilance Awareness Week:

Our students won several prizes in different competitions organized during the Vigilance Awareness Week.

Prizes Own at the events organized by NALCO:

Sonam Acaharya, 3rd Year ECE : 1st Prize in English Elocution

Arpita Mohanty, 3 rd year CSE	:	3 rd Prize in English Elocution
Akash Pandit, 3 rd year CSE	:	3 rd Prize in Hindi Elocution
Annada Gumansingh, 4 th Year	:	3 rd Prize in Odia Elocution

Prizes Own at the events Organized by State Vigilance Academy:

Mr. Siddhant Kumar Sahoo, 3 rd year	ECE :	1 st prize in Quiz
Ms. Saujanya Paikray, 3 rd year CSE	:	2 nd Prize in English Essay

Second Runners up in YUGMA

Avinash Prasad of 6th semester, ECE branch has bagged the 2nd runner's up award at the oratory competition Yugma 2022, organized by Asthsa School of Management, Bhubaneswar. The competition had a participation of 116 students from 22 different colleges in and around Bhubaneswar. It was the 5th edition of the competition and Silicon has been winning in all the editions till date in various positions of awards

Winners of Inter-college Sports

SiliconTech students' Basketball Team won the 'Champions of the Orion Cup' during the annual 'Orion' cultural fest at Sri Sri University, Cuttack on 22nd March 2022. Our students' Volleyball Team won the 'Champion's Trophy' at Valiant 5.0, a tournament organized by National Institute of Science and Technology (NIST), Berhampur on 22nd to 23rd March 2022. Our students' Badminton Team won the 'Champion's Trophy' in the Men's Doubles Badminton tournament which was organized by Sri Sri University on 23rd March 2022.

Runners Up in HashnodeXAuth0 Hackathon

Anirudh Panda from B.Tech. EEE Batch 2023 got the Runners Up prize in HashnodeXAuth0 Hackathon conducted in August 2021, where Hashnode partnered with Auth0 for a Hackathon. The Hackathon had two stages - building a minimum viable product (MVP) within the given time and writing a blog about it in Hashnode. Anirudh created an app called 'Opentek' which tried to solve the problem of excessive Google searching to find events, programs, or resources.

Activities of the ED Cell

Business Model Canvas

The Entrepreneurship Development Cell and Institution's innovation council organized a session on business model canvas on 3rd July 2021. Mr Joydeep Rakshit, Director (Sales) CloudEdz, Hyderabad took the session where around 30 students and 5 faculty members attended the session. In his talk he emphasized on how to develop the BMC. The business model canvas is a shared language for describing, visualizing, assessing and changing business models. It describes the rationale of how an organization creates, delivers and captures value. The business model canvas is a great tool to help one to understand a business model in a straightforward, structured way. Using this canvas will lead to insights about the customers one serve, what value propositions are offered through what channels, and how one's company makes money Mr. Rkshit described how it is important for the business organization before one lunch a product in the market.

Session on Innovation/Start-up Ecosystem Enablers

Entrepreneurship Development Cell and Institutions Innovation council organized session (online) on start-up eco-system enabler on 8th July 2021. Prof. (Dr) Lalat Indu Giri, NIT, Goa, was the resource person. Dr. Giri in his talk highlighted today there are lot of opportunities in agricultural sector. This is the area where we have to be innovative. In his talk he pointed out the organization at national level and at international level that are supporting startups. But the ideas should be innovative and it must be solving the real-life problem. He also presented list of funding agency and research organization who are helping the start-up. Dr. Mahendra Prasad Agasty talked about Switchtech Incubator foundation and Silicon Innovation and Incubation center. He highlighted about MSME, Business Incubator at Silicon. He told today the funding is not a problem, there are number of schemes and benefits available in the country for the startups.

Session on Intellectual Property Rights

Entrepreneurship Development Cell and Institution's Innovation council organized an interactive session on Intellectual Property Rights (IPR) on 10th July 2021. The resource person was Dr. S.K Kar. Dr. Kar is the head of IP facilitation Centre, CTTC, Bhubaneswar. The web session was conducted on zoom and was attended by around 35 students from across branches. The major focus was on creating awareness on IP; access to IP related services & assistance for startups.

World Entrepreneurship Day

The Entrepreneurship Development Cell and Institution's Innovation council, Silicon Institute of Technology, observed World Entrepreneurship Day on 24th August 2021. In this occasion a panel discussion was organized. Mr. Suresh Chandra Nayak of STL, Surendra Nath of Vaishali dairy and Swyam Vikas Pattnaik of "Startup Tyme" were the penalist. Mr. Bhabani Shankar Pani of Span Resource Management moderated the discussion. Dr. Mahendra Prasad Agasty, FIC ED cell gave the welcome address. Mr. Nayak initially talked about the factors that triggered him to be an entrepreneur. The speaker also talked about the mistakes he did during his entrepreneurship journey. Surendra Nath is an Alumni entrepreneurs, passed out from Silicon Institute of Technology in 2013. He narrated how the logical thinking of an engineer and experience of working in private firm helped him to become an entrepreneur. The last speaker was Mr. Swayam Vikash Pattanayak who is running "Startup Tyme" since 2016 where he trains students for the core skills to present themselves in front of MNC. At the last part of the session Mr. Bhavani Pani congratulated the three entrepreneurs for the great jobs they are doing in their respective startups. Mr. Pani asked the individual entrepreneurs what motivated each one of them for the startups.

Webinar on Personal Financial Planning 'FINMANTRA"

The Entrepreneurship Development Cell and D2C Igniters club, Silicon Institute of Technology, Bhubaneswar organized a two days webinar on Personal Financial Planning "FINMANTRA" from 25th to 26th September 2021. Mr. Dhananjay Banthia, founder Smart Acumen consulting and a certified financial planner was the keynote speaker. The session started with the welcome address by Dr. Mahendra P. Agasty, FIC ED Cell. Mr. Banthia on his first day of his talk highlighted on personal financial planning and its importance. On day two, Mr. Banthia talked about the dynamics of stock market and mutual funds. He gave the basic idea about the stock market and the companies. He also discussed about Mutual funds (SIP, STP) and the power of computing.

Celebration of National Education Day

Entrepreneurship Development Cell and Institution's Innovation council organized a webinar on the theme "New Education Policy and the Innovation" on the occasion of National Education Day on 11th November 2021. The welcome address was delivered by Prof. Jaideep Talukdar, Principal silicon Institute of Technology and introduction to the guest was given by Dr. Mahendra P. Agasty, FIC, ED Cell. The talk was delivered by Prof. S.P. Adhikari, Former vice chancellor F. M. University, Balasore, Odisha. He started by stating that the National Education Day being celebrated as an honor for the birth anniversary of our esteemed First Education Minister of India, Dr. Moulana Abdul Kalam Azad. He highlighted some important points about New Education Policy. The speaker further talked about the New National Curriculum Framework for schools, teachers, and adult education. He also talked about the Science and social transformation of a child and how to achieve it. And what are the new roles of universities. Universities must encourage learners to transform lives even through small science by encouraging entrepreneurship, creativity, and innovation. More than 100 participants attended the talk.

Celebration of National Pollution Prevention Day

Entrepreneurship Development Cell and Institution's Innovation council organized a webinar on the theme "Raising awareness for pollution prevention" on the occasion of National Education Day on 2nd December 2021. The welcome address was delivered by Prof. Jaideep Talukdar, Principal silicon Institute of Technology and introduction to the guest was given by Dr. Mahendra P. Agasty, FIC, ED Cell. The session was started by the guest speaker, Prof. Jaya Krushna Panigrahi. He started by stating the significance of National Pollution Prevention Day to commemorate the people who lost lives in Bhopal gas tragedy in the year 1984. He then showed some humorous slides depicted that what mother earth gave us as a wonderful life and world. And in lieu of which we have given back mother earth only a polluted world. Science and development have resulted in unsustainable practices and environmental pollution and resource depletion is gaining momentum. More than 100 participants attended the talk.

Orientation Programme on Entrepreneurship

The ED Cell of Silicon Institute of Technology organized an orientation program on 18th December 2021 for newly admitted students. The objective of the program was to create awareness about Entrepreneurship among the students and motivate them on how to solve the problems in human life and society through innovative ideas and earn monetary profit from it as well. The session started with the motivational talk by Dr. Mahendra P. Agasty, Faculty-In-Charge, ED Cell. In the second session there was a session on "My Story-Motivational session by Successful Entrepreneur".. ED Cell invited Mr. Sibashis Mishra, CEO and Founder Bookingjini to share his story among the students as an entrepreneur. About 70 students from 1st year attended the programme. The student members conducted different fun and learning activities for the participant to motivate them towards entrepreneurship.

My Story - Motivational Session by a Successful Innovator

The Entrepreneurship Development Cell, Silicon Institute of Technology, Bhubaneswar organized a motivational session by a successful innovator on 21st December 2021 (virtual mode). ED Cell invited Dr. Pankaj Prashar, Founder and CEO Cutting Edge Medical Devices Pvt. Ltd to deliver the talk. Dr. Mahendra P. Agasty, FIC, ED Cell welcomed the guest and participants at the beginning. Dr. Prashar talked about his journey from a Medical professional to an innovator and finally an entrepreneur. He is a rare academic combination; he is a qualified physician with an MBBS degree. He has developed

many innovative affordable medical devices for the mass healthcare. He has put 17 years of his life into innovation and entrepreneurship now with his insane perseverance he has started tasting the sweet taste of success. In his talk he talked about his motivation behind his innovation and he rightly identified the problem the people face while going for various medical testing (proteins in micro quantities as an early diagnosis of kidney disease in patients with diabetes, hypertension, and highrisk pregnancies). More 100 students and faculty members participated in the deliberation.

Exposure and field visit for problem identification

The Entrepreneurship Development Cell and Institution's Innovation council organized exposure and field visit for problem identification from 5th to 6th January 2022. Because of the COVID scenario as the institute was closed the students were asked to visit in small groups even individually to their localities/field to identify the problems. The students were asked to follow all the COVID guideline during their visit. Some students visited the college campus to identify the problems in the campus. They visited canteen, hostel and other facility areas, parking space to identify the problem. They also discussed with the employees in these facility areas to know about their problem. One of the problem areas in the college canteen was to manage the waste and to save the wastage water. They also visited parking areas at the institute. Some students also visited nearby villages Kalarahanga and Patia to talk to the villagers to know the problem of the villages. The students also visited to slum areas. Basing on their problem identification they are asked to submit the solutions. The students were asked to prepare presentation on the solution either in groups or individually. Innovations ambassadors helped the students in this process

Session on Ideation and Problem Solving

The Entrepreneurship Development Cell and Institution's innovation council organized a session on ideation and problem solving on 24th January 2022. About 60 students and 5 faculty members attended the session. Dr. Mahendra P. Agasty took the session and emphasized the process of idea generation and opportunity identification. He also discussed about the idea generation technique the student should use while giving the solution to a problem. They should also study the market trend to find out the problems and to give its solution.

Entrepreneurship Awareness Camp

The ED Cell of Silicon organized an Entrepreneurship Awareness Camp (EAC) from 4th to 6th Feb, 2022. The Director of Silicon Prof. S. K. Mishra welcomed everybody to the inaugural session and urged the students to choose entrepreneurship as a career option. The programme coordinator Dr. M. P. Agasty spoke about the objective of the programme. The chief resource person for the first day, Mr. C. R. Patnaik, Former Regional Coordinator of EDII, said that entrepreneurship comes easily to an intelligent person and engineers are intelligent persons. He urged the students to dream big, listen to their hearts and embrace challenges in life. On the second day, Dr. M. P Agasty, discussed elaborately about the role of Business Incubator in developing entrepreneurship. And as Silicon now has a Business Incubator, he urged the students to take full advantage of that. Mr. S. K. Ratha, Assistant Director MSMEDI spoke on formalities of starting new enterprises. There was also a session in which students got a chance to interact with an entrepreneur. The entrepreneur was Mr. Prasenjeet Pati, CEO, Afixi Technologies who emphasized that money is not a constraint to become an entrepreneur now-a-days as there are many established entrepreneurs who are willing to fund start-ups. So, more and more students should opt for this career.

Session on Achieving Problem Solution Fit and Product Market fit

The Entrepreneurship Development Cell and Institution's innovation council organized a session on achieving problem solution fit and product market fit on 13th Feb 2022. Dr. Pankaj Parashar took the session where about 200 students and 15 faculty members attended the session. This was a part of mentor mentee programme was organized by Silicon Institute of technology. Five mentee institute participated in this session.

Ideathon 2022

The Entrepreneurship Development Cell of Silicon institute of technology, Bhubaneswar organized first round of Ideathon 2022 on 3rd and 10th April 2022 on virtual mode. The final and the second round for the selected team was held on 14th and 15th May 2022. Twenty teams participated in the first round of idea generation competition. After brief introduction the programme by Dr. Mahendra P. Agasty, participants were asked to present their ideas. Mr. C. R. Patnaik, former regional Coordinator EDII, Dr. Prakash Kumar Rout and Mr. Sushant Pattnaik were acted as judges. The major criteria for presentation were problem statement, solution to the problem and technology used. Idea hackers presented their ideas in teams. Each team was given 5 minutes time to present their ideas Top 10 teams were selected in the first round. All the participants are advised to develop their prototype based on their ideas and present during E-Fest. All these 10 teams were awarded with cash prizes

Mentor-Mentee Programme (Exposure Visit Cum Training Program)

The Institution's Innovation Council, Silicon Institute of Technology, organized exposure cum training programme for 5 mentee institutes from 19th to 20th April 2022. Depending upon the performance of Institution's Innovation Council of Silicon Institute of Technology for the year 2018-19, 2019-20 and 2020-21 Silicon Institute of Technology was appointed as the mentor to 5 institutes by MoE, Govt. Of India to improve their performance in the areas of entrepreneurship and startup. Bengal Institute of Technology, West Bengal, Royal Global University, Assam, Model Mahila College Jharkhand, Gandhi Institute for Engineering and Technology, Bhubaneswar and DAMITS Rourkela participated in the training programme. All the participants were stationed at institute guest for effectiveness of the programme. There were training sessions on IPR, entrepreneurial motivation and Incubation Management. The participants visited incubation units and and other facility centre at Silicon. The programme was supported by MoE, Govt. Of India

Day-1: The session was started by the Principal, Prof. Jaideep Talukdar. He addressed the gathering by delivering a welcome speech. Prof. Jayshree Das, President IIC then addressed the gathering by Innovation & Research Facilities at Silicon. Dr. M.P. Agasty then spoke about the Incubation and Pre-Incubation Facilities at Silicon. Mr. C.R. Patnaik then motivated the gathering with his talk on entrepreneurship.

Day2: The session started by a presentation by Dr. S. Badhei, Startup Odisha on Incubation Management. They talked about various features to take care of while starting a business. Mr. Pawan Kumar, IMMT, Bhubaneswar then gave a presentation and motivational talk on IPR. The speaker initially categorized and defined what all comes under Intellectual property. Dr. M.P. Agasty then took the candidates to visit the Incubation Unit and Start-up Odisha.

Session on IPR and IP Management for Start-UP

The Entrepreneurship Development Cell and Institution's Innovation council organized an online session on IPR and IP Management for Start-UP on 12th May 2022 from 6 PM to 7 PM. This was a

part of mentor-mentee programme. The participants from Bengal Institute of Technology, West Bengal, Royal Global University, Assam, Model Mahila College Jharkhand, Gandhi Institute for Engineering and Technology, Bhubaneswar and DAMITS Rourkela participated in the online session. Dr. Mahendra Prasad Agasty spoke on the objectives of the programme. Mr. Pawan Kumar, Senior Scientist, IMMT, Bhubaneswar gave a presentation IPR. The speaker initially categorized and defined what all comes under Intellectual property. According to him, it refers to creations of the mind that include inventions, literary and artistic work and symbols, names, images, and designs used in commerce. The speaker then differentiated it with the Tangential property. He then explained IP evolution happened and how the "idea" is taken care at various situations. He also tabulated different forms of IPR such as patents, trademarks, designs, geographical indications, copyright, integrated circuits, etc should be registered or not and what is the term of protection for each entity. More than 100 students from all the mentee institutes participated in the deliberation.

Workshop on Prototype Development

The Entrepreneurship Development Cell and Institution's Innovation council organized workshop on prototype Development from 13th to 14th May 2022. The objective of the workshop was to provide a brief idea of prototype and prototyping and about it's important in the various industries and other sectors. The workshop was a part of Ideathon organized on 3rd and 10th April 2022. The best ten ideas that were selected during the competition were asked to join in the workshop for further improvisation of their product and develop the prototype. About 50 participants participated in the workshop. Dr. Mahendra P. Agasty, FIC, ED Cell spoke about the objective of the workshop and advised the students to take the benefit from this. Mr. N. Krishna Sri Sai, CTO, Bloomanara conducted the workshop.

Entrepreneurs Fest 2022

The ED Cell of Silicon organized Entrepreneurs Fest 2022 from 28th to 29th May 2022. Prof. Jaideep Talukdar, Principal, Silicon Institute of Technology, welcomed everybody to the porgramme and insisted that academic institutions should focus on creating entrepreneurial mindset and inspire students to be innovative, think independently and work dedicatedly. The programme coordinator Dr. M. P. Agasty briefed the gathering about the objective of the programme. Mr. Debashis Pattnaik, President TiE Bhubaneswar Chapter joined as chief guest and Mr. Abanis Nayak, Managing Director, ZTOP IoT Solutions Pvt Ltd. Join as chief speaker. In the second session business guiz competition was organized by the cell. About 100 students from all over the state participated in the competition and the winner were given the cash prizes of Rs. 10,000. On the second day, Prototype Competition was organized where the students from all over the state participated. The groups those who were selected during the Ideathon competition in April took part in the protype competition. Thirteen groups from different part of the state participated in this competition. And three groups were selected for their innovative ideas and prototype development. The students were given the cash prizes of Rs. 20,000. T. Pavan Kumar of IMMT, Bhubaneswar, Dr. Prakash Kumar Rout joined as judge. The students also organized various competition like Pitch against start-up and the Barter game. The cash prizes of Rs. 20,000 were given to the winners.

Official Events/ Activities Chairman's Address 2021:

The Chairman Mr. Joe Madiath addressed the staff members on 28th July 2021. Last year this event did not happen due to the complete lock down during the 2nd fortnight of July. Principal Dr. Jaideep Talukdar delivered the welcome address followed by a presentation on achievements and activities by Dean Academics Dr. Debabrata Kar. The Chairman in his address thanked the staff members for

their unconditional untiring effort during the pandemics to continue the academic and other critical activities of the Institute. He expresses his deep condolence for the sad demise of the near and dear ones of the staff and students. He suggested that the Institute should organize some training programs or courses for its students on managing the situation under pandemics and other disasters. He also spoke about the efforts of Gram Vikas to help the people in the rural areas of Ganjam, Gajapati and Kalahandi. The Director Dr. Saroj Kanta Misra spoke about the annual appraisal process and appealed all staff to provide additional effort to take Silicon to the next higher level.

Independence Day

The Independence Day was celebrated in the Institute on 15th August 2021. The Principal Dr. Jaideep Talukdar hoisted the National Flag and addressed the gathering. He spoke about the Atmanirvar Bharat and the responsibilities of young engineers for shaping the nation for the coming decades.

Vaccination Center at Silicon

A Covid vaccination Center was run inside the Silicon Campus from 10th June to 31st July 2021. This center was organized by BMC and managed jointly by BMC and Silicon. The centre was one of the popular vaccination centers in Bhubaneswar for its spacious and green environment. In addition to the regular registered visitors, special drives were organized for Silicon staff and students, for habitats of nearby slums and for the workers of nearby Industries.



Foundation Day Lecture & Inaugurated the Maker's Lab

The Foundation Day was observed on 10th September 2021. Dr. Srikanth Sundararajan, Partner at Ventureast Fund Advisors India Limited and a member of our Governing Body, delivered the Foundation Day Lecture on "Tech Trends for Today and Tomorrow". He talked about the upcoming trends for the technology, startups, market and various upcoming proposals at government and corporate levels. He also emphasized on how Silicon should target its developments keeping an eye on these trends. After the lecture the Makers Lab was inaugurated. The main objective of the Lab is to provide students with an opportunity to learn and experience new technologies, as well as construct and build Proofs of Concepts (POCs) for a diversity of technologies under the guidance of experienced mentors. The laboratory is equipped with all the necessary electronic components, sensors, microcontrollers, open-source platforms, 3D printers, toolkits, etc. to design, build and craft things. The new Lab is fully operational and the activities are governed by Student Innovation Promotion Cell (SIPC), headed by the Dean Research Dr. Jayashree Das.

Formation of Silicon Students Council

The Silicon Students Council 2021-22 was formed with online elections conducted in several phases. The election for the Secretary General was held on 1st November 2021. There are 56 Council

Members (19 girls and 37 boys) elected/nominated and Mr. Debadutta Pattanayak from 7th semester ECE was elected as the Secretary General.

Observation of National Education Day and Webinar on NEP

The IQAC observed the National Education Day on 11th November 2022 to commemorate the birth anniversary of Maulana Abul Kalam Azad, the first Education Minister of independent India. A webinar on National Education Policy (NEP) was organized on that day at 4:00 pm. Prof. Siba Prasad Adhikary, the former Vice Chancellor of FM University, Odisha, spoke on the subject. He gave a historical view on the National Education Policy at different time in the past and spoke in detail about the National Education Policy, 2020. More than 100 faculty members and students participated in the webinar.

Orientation and Welcome for PG Students

The Orientation Program for the newly admitted Post Graduate students was held on 13th November 2021 in physical mode. A brief introduction to the Academic Processes and ERP Processes was provided to the students along with small presentations from Library, Canteen, Transport and Residence. In the afternoon the senior PG students welcomed the new batch with a fun filled program.

Orientation-cum-Induction of 2021 Admission Batch

The Orientation-cum-Induction program, for the 4th batch under Autonomy (2021-2025) was conducted from the 1st December to 8th December2021. It started with few ice breaking sessions by the respective Faculty Advisors on 1st December which were conducted online. The orientation program was also conducted online on 2nd December 2021. Students joined the physical Induction Program on 6th December. Students were explained about the regulations, processes, and facilities of the Institute during the Induction Program. There were invited guest-lectures in the different areas of character building and nurturing a value system. Among the eminent invited speakers were Prof. Sunil Sarangi (Ex Director NIT, Rourkela), Dr. Md. Imran Ali (Anti-tobacco Activist), Mr. Abhijit Sen (Ex AVP, Infosys and Founder of Syllogistek Systems) and Dr. Shraddha Padhi (Professor OB & HR, KSOM). A few of our alumni also joined the session to motivate our students with their success stories.





NPTEL Workshop

Silicon Institute of Technology, Bhubaneswar has been added as a local chapter of NPTEL (National Program on Technology Enhanced Learning). A NPTEL Awareness e-workshop was held in association with Sree Narayana College for Women and St. Thomas Arts & Science College from Kerala on 9th December 2021.

Alumni Meet

The 13th Alumni Meet 2021 was conducted offline at the Institute on 18th December 2021. A total of about 250 alumni attended the event. Many of the alumni members, who visited the campus after a long time, took interest in the recent developments. They appreciated the development in the infrastructure and achievements which includes the Autonomy and NIRF rank. A small cultural program was organized in the Auditorium followed by a lunch.





Republic Day

This year there was an instruction from AICTE to wind up the Republic Day function by 9:30 am. Accordingly the unfurling of the National Flag was done at 9:00 am by the principal followed by the National anthem by all present. After the address by the principal to the gathering, a small cultural program consisting of a recitation, a song and a mono acting were presented by students under the supervision of the Cultural committee.



Induction Program for Ph.D. Students 2022

SiliconTech launched its PhD program in January 2022. During the third week of February, 42 candidates, selected via an entrance exam followed by interview, enrolled in various PhD programs. The induction program for newly admitted PhD scholars was conducted on 26th February 2022. The key speakers who addressed the participants were Dr. Saroj Kanta Misra, Director-in-charge; Dr. Saroj Rout, Additional Professor, EEE; Dr. Jayashree Das, Dean (Research); Dr. Tanmay Panda, visiting Professor at SiliconTech and Dr. Sunil Kumar Sarangi, Ex-Director, NIT, Rourkela.





Staff Award Function

The Staff Award function was organized on 12th March 2022. Long Service awards along with felicitation to Ph.D. awardees were the major part of the function. Prizes also distributes to the winners of sports and games conducted earlier. There were some cultural activities of songs and dances.

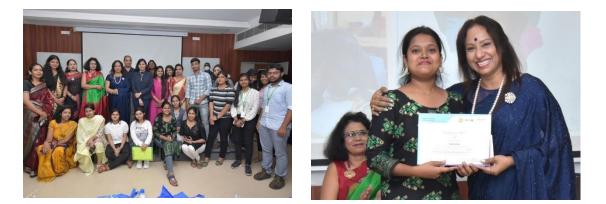


Induction Program for Faculty Members

The Internal Quality Assurance Cell (IQAC), in association with the Department of Human Resources (HR), organized an Induction- Cum- Refresher Program on 26th March 2022, to acquaint the newly joined faculty members (January- March 2022) with the functioning of the Institute and convey the professional expectations while they discharge their duties. It also served as a Refresher program for the faculty members who have joined since 2018. The session began with an informative talk by the Director on the topic, 'Image of a Teacher', followed by the Dean (Academics) on 'The Broader Perspective of Faculty Responsibilities'. Subsequently, two prominent invited speakers, Prof. Nitai Sundar Das and Prof. Tanmay Panda delivered talks on 'The Importance of Teaching Learning Process- Qualities of an Effective Teacher' and 'The Role of Educators- a Changing Paradigm', respectively. The post lunch session was addressed by our principal, with deliberation on 'Effective Communication Skills- Verbal & Non- Verbal' and FIC ERP on 'The Code of Ethics & Academic Module', followed by a general query resolution session with HR and FIC ERP. 17 newly joined faculty members and others joined this program, which was part of a range of quality enrichment programs undertaken by IQAC.

Women's Day Celebration

The International Women's Day celebration at Silicon Institute of Technology was organized on 26th March 2022 by the SAGE-W cell of the Institute. Based on 2022 theme "Gender equality today for a sustainable tomorrow", the event witnessed a soulful participation of likeminded community with discussions on varied topics centered on societal inhibitions and their moderation. The event started with a welcome song followed by a short speech by our Principal Dr. Jaideep Talukdar. The program continued with a formal introduction followed by talks by the invited speakers and guests of the day: Dr. Chidatmika Khatua, a philanthropist & social activist, Dr. Sunanda Mishra Panda a social entrepreneur, and Ms. Archita Sahu, the famous actress, shared their experience in their respective domains which inspired the audience to develop an understanding for the need of Gender Equality. The program remained lively and interactive by few performances by our students and staff and a panel discussion. Prize distribution was there for the Women Achievers in various categories.



NOESIS 2022

'Noesis', the Annual Technical Fest of Silicon Institute of Technology was held on 24th April 2022. There were 14 events conducted by different clubs in coordination with the Students' Council along with a Nukkad Natak performance by Silicon Theatre Club. These events were an amalgamation of fun and learning where spectacular ideas were displayed by the students. The events were Robotics, Lan-Gaming, Quiz, oratory events, Treasure Hunt, coding, personality test, Bell the CAT and Get the GATE, Poetry Writing and Recitation, Iclique to showcase photography skills.





ZYGON 2022

The Institute's cultural fest, Zygon, for the year 2022 was conducted on 30th April and 1st May 2022. The event was organized at the North Lawn of the Institute. This was after a long gap and marked a break from the online cultural events that happened during COVID restrictions. The two-day fest had events in singing, dance, music band performance, classical and folk dances, a 'walk the ramp' show, and a prize distribution ceremony for the winners of the technical events that happened during NOESIS 2022. The final year students also came up with some special performances branch-wise. The event was filled with fun and mirth. It was a joint venture of Students' Council and Music club. The photography club and Creative Clubs also did their best in terms of covering the event and decorating the campus respectively.





Farewell Function-UG 2022 Batch

The Farewell Dinner for 2022 graduating B. Tech. students was organized in the evening of 1st June 2022 on the North Lawn. The Director, Principal and the FC of Alumni Activities addressed the outgoing batch. Several students shared their experiences of last four years during the event. The program was followed by the Farewell Dinner.



Farewell Function- PG 2022 Batch

The Farewell Function for 2022 graduating PG students was organized on 4th June 2022 in Lecture Hall 1. This batch of PG students have spent only 18 months in the campus and are well placed. The Director, Principal, Dean Academics and some other faculty members spoke during the functions. Several students also shared their experience, some spoke in detailed. The program was followed by the Farewell Dinner.

Events/Activities of the Sports, Cultural & Staff Welfare Committee

Azad Hind Events 2021

The Azad Hind Events were organized by the Meta-Academics Cell between 7th and 15th August 2021 for the 75th Independent Day of India. There were competitions on Essay Writing, Poster Making and Elocution. There were 75 registered participants in the event and two of our alumni members: Subhangi Nayak (2019 passing out batch) and Disha Kumari (2020 passing out barch) were judges for these competitions.

Health Talk

A Health Talk was organized by the Staff Welfare Committee on 25th August 2021 at 11 AM. Dr. Tapas Ranjan Sarangi, C.E.O and Chief Consultant at Guruji Ayurveda Centre, Bhubaneswar, Odisha, delivered the talk in Odia. More than 100 staff members, mostly from Establishment and Administration had attended the talk.

Webinar on "ROLE OF PROPER FOOD FOR A HEALTHY WELLBEING"

The Silicon Sports Committee in association with the Food Court organized a webinar on "Role of Proper Food for a Healthy Wellbeing" on 4th September 2021 at 3:00 PM. Er. Durgesh Ranjan, Nutritionist & Fitness Consultant conducted the interactive program which was attended by students, faculty members and other staff members.

Talk on Happiness

A Talk on Happiness was organized by the Staff Welfare Committee on 7th September 2021 at 11:00 AM. Mr. Krushna Chandra Dash delivered the talk on Happiness.



Webinar on Gender Parity in Professional Education

An awareness program on "Gender Parity in Professional Education" was conducted by the SAGE-'W' (Social Awareness on Gender Equality for Women) cell in virtual mode on 25th September 2021. The speaker for the webinar was Mr. Pritam Bhadra, a motivational speaker, Digital Advertiser, and consultant. He is also an elite alumnus of Silicon Institute of Technology and is currently working in Amazon Services, Bangalore. The speaker provided a crisp insight into the topic with the help of statistical data and real-life examples. Students of 11th and 12th grades from various schools (St. Paul's School, Rourkela, Future Bhubaneswar School, DAV Public School CS Pur, DAV Public School Unit-8, Stewart School, KIIT International School, Mothers Public School, ODM Public School) actively participated in the event.

Talk on "Jagrata Jeebana-Unnata Jeebana"

A Motivational Talk on "Jagrata Jeeban-Unnata Jeeban" for the staff members was organised on 2nd October 2021 on the occasion of birth anniversary of Shri Lal Bahadur Shastri & Mahatma Gandhi in the Auditorium. The session was for 1 hour from 8.30 AM to 9.30 AM. Mr Mohammad Imran Ali, a social activist, anti-tobacco warrior had addressed the gathering. Md. Imran Ali, is a well-known "Anti-Tobacco warrior" of India. He has done Masters in Social Work. He has been volunteering for tobacco free society, a society with no deadly addiction, since 14 years. Originally,

he belongs to Qazi Sahi, Bhadrak and residing in Bhubaneswar. He has been featured in "Limca Book of Records" in 2018 for his nationwide anti-tobacco campaign in community radios for tobacco free childhood. He is also associated with Community Radios and contributing development messages. He is a Founding Trustee and the Managing Director of a voluntary organization named Salaam Jeevan. The objective of the program was to create awareness among the employees on substance abuse and its impact on work and life. Around 135 staff members had attended this program. It was well appreciated by the attendees.

Grand Finale of Silicon Vibes 2021

Silicon Vibes 2021 was a musical ensemble to engage our students beyond work hours in a productive fashion helping them to stay connected and happy during these trying pandemic times. There were competitions in the genres of dance, music, singing, theatre, creativity, quiz and debating spread over a period of four weeks in the month of September 2021, with a grand finale on October 9, 2021. The Finale comprised participation of our students in musical performances and declaration of results of the various competitions held earlier in this regard. A few of our Alumni had also joined the event.

Yoga Competition:

The 1st Online Yoga Competition was held on 6th November 2021 for Silicon students. Total 16 students registered for the competition. All the performances were judged by Mr. Ajaya Kumar Sahu (External Judge), Mr. Tarini Charana Mishra, Mrs. Suchismita Rout, Mr. Prasanta Kumar Mallik under the supervision of Mr. Gyana Ranjan Biswal, FIC, Sports. Top 3 students got cash prize and merit certificates and all others got the participation certificates. The competition ended with valuable suggestions about practicing yoga in daily life by Mr. Ajaya Kumar Sahu. Winner: Bratiranjan Acharya - 190610522 (3rd year, EEE) Runner: Sanghamitra Sethy - 190310416 (3rd year, CSE) 2nd runner: Aishwarya Samal - 190310198 (3rd year, CSE).

Webinar on "All about myths revolving around Nutrition and Fitness":

A webinar on "All about myths revolving around Nutrition and fitness" was held on 6th November 2021 (Saturday) from 3.00 PM to 4.30 PM. Er. Durgesh Ranjan, Nutritionist & Fitness Consultant was the speaker for the webinar.

Plantation Drive by Silicon Green Club (SGC):

Silicon Green Club (SGC) organized a plantation drive on campus to observe National Pollution Prevention Day on 2nd December 2021. The SGC members across all years participated and planted saplings inside the campus.

Sangam 2021

SiliconTech organized a one-day music fest on 11th December 2021 to celebrate the cultural diversity of our nation under the 'Ek Bharat Shrestha Bharat (EBSB)' program, an MHRD initiative of Government of India. Cultural programs including songs and dances were presented by participants from different schools and colleges as well as groups from different social and cultural organizations.

Kala Kumbh

SiliconTech celebrated 'Kala Kumbh', an artists' workshop from 11th to 17th December 2021, under the banner of 'Azadi Ka Amrit Mahotsav', in partnership with NGMA (National Gallery of Modern Art), Ministry of Culture, Government of India. It has been the host to one of the canvas scrolls which depicts the unsung heroes of Odisha who played an integral part in the fight for independence. A team of 70 professional artists from different parts of Odisha painted the canvas, which features images of various freedom fighters from Odisha. There were a few other subsidiary scrolls also that displayed 'Gond' art.



Silicon Staff Sports 2022

Sports events were organized for our staff members from 10th to 11th January and 16th to 19th February 2022 in various outdoor and indoor games. All the matches were played with true sportsman spirit and enjoyed by the audience.

Open Mic 2022

An annual literary and musical event celebrating words and emotions, Open Mic encourages writers, performers, comedians, and storytellers. The event was conducted on 6th February 2022 in online mode and featured two rounds this year. Participants were judged on the basis of content and presentation through the videos they submitted to Google Drive in the first round. In the second round, the screened participants from the first round competed. Prizes were offered in two categories: audience voting and judges'



scores. These were 19 competitors and more than 90 audiences. Mr. Pritam Dash and Ms. Disha Kumari, two of our alumni, were the judges. Mr. Vivek Mohapatra (4th Year) and Ms. Arpita Mohanty (3rd Year) were winner and runner under the Judge's category and the names got interchanged under the Voting Category.

National Science Day 2022

The Silicon Green Club (SGC), in association with the Internal Quality Assurance Cell (IQAC), hosted an invited talk session entitled 'Science, Environment and Health' on 28th February 2022, to celebrate National Science Day. Dr. Jaya Krushna Panigrahi, Secretary, Odisha Environmental Society, delivered the talk, where he highlighted the importance of science & technology in shaping the future of mankind. He said that scientific awareness and knowledge can lead to a better living environment for the people and that only science and technology can offer sustainable answers to common problems. There were around 50 participants in the event.

Book Exhibition 2022

The Library Committee of Silicon Institute of Technology, Bhubaneswar organized a book exhibition on 11th and 12th March 2022. Over 650 titles were on display by two vendors in the exhibition. Books of various genres including Science, Technology, Mathematics, English and Literature were displayed and sold. The latest publications from several major publishers were also exhibited.

SIT MUN 2022:

SiliconTech organized the 4th edition of the Silicon Institute of Technology Model United Nations (SITMUN 2022) from 11th to 13th March 2022. Ms. S. Sushree, DCP Traffic, Bhubaneswar-Cuttack, the youngest IPS Officer of Odisha Cadre, was invited as the Chief Guest. The conference had three committees– United Nations General Assembly Disarmament and International Security Committee (UNGA DISEC), United Nations Human Rights Council (UNHRC) and United Nations Framework Convention for Climate Change (UNFCCC) and one international



press. 150 delegates from SiliconTech and other colleges in Bhubaneswar attended the conference.

Ama Odisha" by Music club

Silicon Music Club observed Utkal Diwas at the Institute on 2nd April 2022, to celebrate the cultural richness of the state under the Ek Bharat Shrestha Bharat (EBSB) initiative of the Govt. of India. The event was named Aama Odisha: a musical evening with renditions in Odissi dance, Sambalpuri dance, Odia songs and a band performance. The event was inaugurated with the address by the Director of the Institute and by playing the state anthem. It was a novel initiative at the Institute to observe Utkal Diwas and with the setting stone already placed the tradition will continue for the years to come. In an attempt to paying homage to the Odia language the event was hosted in Odia and the Director's address was partly in Odia too, which he also chose to explain in English for the non-odia speakers to understand. To further the purpose of sensitizing the pupils in the cultural grandeur of the state, a trail of competitions are being conducted for a fortnight named Milan 2022, in the genres of essay writing, poster making, song competition and followed by a webinar. The participants were from Silcon Bhubaneswar, Silicon West and from St. Francis Institute of Technology, Pune (our paired Institute under EBSB). Milan started on 4th April 2022 and ends on the 16th April 2022.



Bood Donation Camp

On 6th April 2022, RRC and YRC of the Institute organized a blood donation camp in collaboration with the Capital Hospital Red Cross team. 250 + staff and students together participated and out of which 205 units of blood were collected. All necessary arrangements like refreshments, resting area and all other necessary processes were made keeping in mind the heat wave. All donors and volunteers participated enthusiastically and all of them got certificates along with identity cards from Red Cross Blood Bank.



Institute Collaborations

MoUs:

SI. No.	Organization/Industry
1	The Institute of Engineers (India)
2	Institute of Minerals and Materials Technology (IMMT), Bhubaneswar
3	Perfect VIPs Techno Solutions Private Limited, Bhubaneswar
4	AcesoCloud Software Solutions Private Limited, Bhubaneswar
5	Silicon Techlab Private Limited, Bhubaneswar
6	UdreamTechnolab Private Limited, Bhubaneswar
7	NORD
8	STMicron*
9	Phoenix Robotics

Institute Achievements/Recognitions

ARIIA Ranking 2021

MoE & AICTE released ARIIA ranking 2021 (Atal Ranking of Institutions on Innovation, achievements). This time MoE has categorized ranking into four categories (Band-Excellent, Band Performer, Band-promising, and Band Beginner). Silicon Institute of Technology has been placed under Band Performer. Atal Ranking of Institutions on Innovation Achievements (ARIIA) is an initiative of the Ministry of Education (MoE), Govt. of India to systematically rank all major higher educational institutions and universities in India on indicators related to "Innovation and Entrepreneurship Development" amongst students and faculties.

SiliconTech received Start-up Cell award from BPUT, Odisha

SiliconTech received the Start-up Cell Award from Biju Patnaik University of Technology (BPUT), Odisha on 21st November 2021, on the occasion of its 20th University Foundation Day. This award was given for the various start-up cell activities based on the participation of the students and faculty mentors of Start-up Cell/Entrepreneurship Development (ED) Cell in the institute, during the 2020-21 session.

MoE, Government of India Awards SiliconTech's Institution Innovation Council (IIC)

The Ministry of Education (MoE) Innovation Cell, Government of India, recognized SiliconTech's Institution Innovation Council (IIC) as one of best performing IICs on 1st December 2021, for its performance in the year 2020-21. Institution's Innovation Council annual performance result (2020-21) was announced at a function (in virtual mode) at AICTE, New Delhi. Silicon Institute of Technology, Bhubaneswar (SiliconTech) has been recognized as the 'best performing Institution Innovation Council' having the highest star rating for the third year consecutively, by MoE, Govt. of India. The rating process started in the year 2018-19. In the year 2018-19 IIC, Silicon Institute of Technology, Bhubaneswar was among the best 25 in the whole country. It also received the highest star rating in 2019-20. In 2020-21, 2680 Institution's Innovation Council of different universities/colleges participated in the rating process. SiliconTech is among 13% of the institutes across the country who got the highest rating. It is one of the 10 colleges in the eastern zone and the only college in Odisha to get this rating. The rating was made on the basis of the institute's performance in undertaking various innovation, entrepreneurship and startup activities in the campus.

NIRF Rankings 2022

Silicon Institute of Technology has been ranked 161 by National Institutional Ranking Framework (NIRF), Ministry of Human Resource Development (MHRD), Govt. of India in the 'Engineering' category while it was 163 last year.

Startup Odisha recognizes SiliconTech as an "Incubator"

'Switchtech Incubator Foundation', an initiative by Silicon Institute of Technology, Bhubaneswar, incorporated as a Section 8 Company (Under the Companies Act 2013), has been recognized as an "Incubator" under the Odisha Start-up Policy-2016. This recognition was announced on 19th April 2022. Presently, the incubator is entitled to receive support from Start-up Odisha to build the startup ecosystem.

C V Raman Award for Academic Excellence

Silicon Institute of Technology, Bhubaneswar (SiliconTech) was awarded the C V Raman Award for Academic Excellence 2021 in the first C V Raman Award Ceremony 2022 (an initiative by C V Raman Foundation), held at National Institute of Science Education and Research (NISER), Bhubaneswar on 10 June 2022. The titles of 'Bigyan Jyoti 2021' and 'Student of the Year 2021' were conferred on two of our students, Subhrajyoti Biswal (B.Tech. CSE, 2024) and Bibhudutta Sahoo (B.Tech. EEE, 2024) respectively.