Vivekanand Institute of Technology

Instrumentation Department

Academic Year 2019-20 (ODD Semester)

FACULTY CONTRIBUTION

- **Orientation Programs**

Sr. No.	Attended By	Course description	Organized by	Date	Number of days
1	Kanchan Chavan	Orientation Program for REV-2019 C Scheme for SCCD Subject	Konkan Gyanpeeth college of Engg., Karjat	10/7/20	1 day
2	Kadambari Sharma	Orientation Program for REV-2019 C Scheme for DE Subject	Konkan Gyanpeeth college of Engg., Karjat	11/7/20	1 day
3	Sangeetha Prasanna Ram	Orientation Program for Rev-2019C Scheme for OOPM subject	V. E. S. Institute of Technology, Chembur	13/7/2020	1 day
4	Gopalkrishnan	Orientation Program for Rev-2019C Scheme for OOPM subject	V. E. S. Institute of Technology, Chembur	13/7/2020	1 day

- **Courses / Workshops Attended by Faculty**

Sr. No.	Attended By	Course description	Organized by	Date	Number of days
1	Madhumati Khuspe	Online workshop on Universal Human Values	AICTE, New Delhi	2/7/20 to 6/7/20	5 days
2	Nilima Warke	Online workshop on Universal Human Values	AICTE, New Delhi	2/7/20 to 6/7/20	5 days
3	Deepti Khimani	Course on "Deep Learning Onramp"	MathWorks Training Services (MATLAB)	11/12/20 to 15/12/20	1 week
4	Kadambari Sharma	Short course on "Learn to Design your own Solar Home System"	Energy Swaraj Foundation in association with VESIT	14/8/20	01 DAY
5	Nilima Warke	ATAL academy Online FDP on Internet of Things	RAIT, Navi Mumbai	24/8/20 to 28/8/20	One Week
6	Nilima Warke	Artificial Intelligence	JSPM's Rajashri Shahu College of Engineering Polytechnic, Pune in association with The Institution of Engineers, India (IEI)	11/1/21 to 17/1/21	One Week
7	Nilima Warke	STTP on Research Methodology	Shri Sant Gadge Baba College of	21/7/20 to 25/7/20	One Week

			Engineering. Bhusawal		
8	Nilima Warke	National Open workshop on Getting aligned to the Publishing process Scopus and Science direct	Elsevier	25/9/20 and 28/9/20	Two days
9	Kanchan Chavan	4 Days of FDP Program on ICT/LMS Tools for Teaching & Learning	Dept of IT & IQAC of K.C. College of Engg.	16/6/20 to 19/6/20	4 days
10	Kanchan Chavan	Yoga for Holistic Health	ISHA Foundation – arranged by VESIT-IQAC	1/6/20 to 2/6/20	2 days
11	Deepti Khimani	Usage of Technology in Covid-19	Terna Engg College, Navi Mumbai	28/5/20 to 2/6/20	2 days
12	Kadambari Sharma	Online non-credit course on "Nanotechnology and Nanosensors, Part 1"	Technion – Israel Institute of Technology offered through Coursera	28/6/20	
13	Kadambari Sharma	Short term training program on "Internet of Things & it's applications in industry"	Ramrao Adik Institute of Technology, Navi Mumbai, Dept of Instrumentation& B&R Automation, Pune	8/6/20 to 12/6/20	5 days

14	Nilima Warke	ISTE approved Online FDP "Automatus 2020-Make Automation Yours"	Vidyavardhini College of Engineering Technology, Vasai in association with Cierto Control & Solutions, Omron Automation PVT Ltd. and Allied Electricals	1/6/20 to 14/6/20	2 weeks
15	Nilima Warke	ISTE Approved One Week STTP on "Natural Language Processing (NLP)-Theory and Practices"	Vidyavardhini College of Engineering Technology, Vasai	22/6/20 to 26/6/20	One week
16	Nilima Warke	Research Methodology	Padm. Dr. V .B.Kolte College of Engg,Malkapur in association with ISTE,	26/5/20 to 30/5/20	One week
17	Nilima Warke	Advances in Internet of things	Fr. CRCE,Bandra	29/5/20 to 2/6/20	One week
18	Nilima Warke	International FDP on "Future Advancements and Applications of Internet of Things"	Sandip Institute of Engineering and Management, Nashik	12/6/20 to 14/6/20	3 days

19	Deepti Khimani	"MATLAB based Teaching-Learning in Mathematics, Science & Engineering".	RAIT Navi Mumbai	18/05/2020 to 22/05//2020	5 days
20	Nilima Warke	IPR Awareness and Patent Prosecution"	CMR ENGINEERING COLLEGE	6/05/2020 to 10/05/2020	5 days
21	Amudha Senthilkumar	Online workshop on Universal Human Values	AICTE, New Delhi	2/7/20 to 6/7/20	5 days
22	Sangeetha Prasanna Ram	Online workshop on Universal Human Values	AICTE, New Delhi	2/7/20 to 6/7/20	5 days
23	Sangeetha Prasanna Ram	Somaiya Research Interventions in Engineering and Technology	K. J. Somaiya College of Engineering	29/05/2020	1 day
24	Sangeetha Prasanna Ram	FDP on Data Science	Fr. Conceicao Rodrigues College of Engineering	26/05/2020 to 30/05/2020	5 days

- **NPTEL/ Coursera Certifications (Teaching & Non-Teaching)**

Sr. No.	Name of the Staff	Coursera Course Description	Organized by	Period
1.	Deepti Khimani	AI for everyone	Coursera	23/5/20 to 12/6/20

2.	Kadambari Sharma	Online non-credit course on "Safety in the Utility Industry"	University at Buffalo and The State University of New York offered through Coursera	7/7/20
3	Amudha Senthilkumar	Linear Circuits 1: DC Analysis	Gorgia Institute of Technology (Coursera)	4 Week
4	Amudha Senthilkumar	Image Processing with Python	Coursera Project Network	One day
5	Amudha Senthilkumar	AI for everyone	Coursera	23/5/20 to 12/6/20
6	Amudha Senthilkumar	Image and Video Processing: From Mars to Hollywood with a Stop at the Hospital	Coursera	4-6 Week
7	Sangita Balerao	Everyday Excel, Part 1	University of Colorado (Coursera)	2-3 Hours
8	Sangita Balerao	Getting Started with Google Sheets	Coursera	1.5 Hours
9	Sangita Balerao	Safety in the Utility Industry	State University of New York (Coursera)	
10	Sangita Balerao	Spreadsheets for Beginners using Google Sheets	Coursera Network Project	1.5 Hours
11	Sangita Balerao	"Learn to Design your own Solar Home System".	Energy Swaraj Foundation	14/09/2020 (One day)
12	Mrunalini Bhogale	Image and Video Processing: From Mars to Hollywood with a Stop at the Hospital	Duke University (Coursera)	4-6 Week
13	Mrunalini Bhogale	Programming for Everybody (Getting Started with Python)	University of Michigan	4-6 Week
14	Akash Koyalkar	PCB Design with Eagle	Udemy	1.5 Hours
15	Akash Koyalkar	Google Cloud Product Fundamental	Google Cloud Coursera	8 Week
16	Akash Koyalkar	Introduction to HTML	Coursera Network Project	1.5 Hours
17	Akash Koyalkar	Spreadsheets for Beginners using Google Sheets	Coursera Network Project	1 Hours
18	Akash Koyalkar	Create Charts and Dashboards using Google Sheets	Coursera Network Project	2 Hours

- **Expert Talks –** Instrumentation department had organized a week-long talk series named "Instru-International talk series" for students of Second year, third year and final year, in which International Alumni and experts interacted with the students and briefed them about the career and higher studies prospectus available in various fields such as Machine learning, VLSI, Process instrumentation, Biomedical and Back-end sales.

Sr. No.	Date	Name of the Expert	Designation & Organisation	Topic	Attended By
1	7-9-2020	Mr.Tanvir Shaikh	Lead Data Scientist at the Finance Department, Genentech/ Roche, USA	How to get a job in Machine Learning	Faculty Members, Students & External Guest
2	8-9-2020	Mr.Avinash Somnathan	Samsung Electronics as a GPU Physical Design Engineer	Introduction to Silicon Design Process from Thought to Chip	Faculty Members, Students & External Guest
3	9-9-2020	Mr.Pranit Kotgire	Crystal International Technology located in Oman as a Technical Sales Engineer.	Sales and marketing in field of instrumentation	Faculty Members, Students & External Guest
4	9-9-2020	Mr. Ganesh R. Rapelli	R&D Product Manager at ABB Ability Innovation Center located	Discussion or Chat with a Department Alumnus	Faculty Members, Students & External Guest

			at Bangalore		
5	10-9-2020	Dr. Zied M. Ouertani	Global Technology Manager, Chemicals and Refining, Energy Industries in ABB,Frankfurt, Germany.	Augmented Reality and Mobile Solutions for Field Operators	Faculty Members, Students & External Guest
6	11-9-2020	Mr. Sriram Viswanathan	software Engineer, Robotics & Digital Solutions in Verb Surgical,United states of America.	Engineer your career	Faculty Members, Students & External Guest
7	12-9-2020	Ms. Radhika Mujumdar	Biomedical Research Engineer at University of Buffalo, United states of America.	From Instrumentation to Biomedical	Faculty Members, Students & External Guest

- **Research Paper Published**

Publication - Author List	Publication - Affiliation of Authors	Publication – Date	Publication - National / International	Publication - Journal / Conference	Publication - Name of The Journal / Conference	Publication - Organised By	Publication – Venue	Publication – Publisher	Publication - ISBN Number
Sangeetha Prasanna Ram, Jayalekshmi Nair, Saraswatula Venkata Suryanarayana, Laxman Singh Danu, Saroj Bishnoi, Haladhara Naik, Srinivasan Ganesan	V.E.S. Institute of Technology , Bhabha Atomic Research Centre (BARC)	26th May 2020	International	Journal	Journal of Radioanalytical and Nuclear Chemistry			Springer	
Raj Anchan, Ashwin Pillay, Aditya Kale, Aniket Bhadricha, Sangeetha Prasanna Ram	V.E.S. Institute of Technology	1-3, July 2020	International	Conference	11th ICCCNT 2020	IEEE	IIT, Kharagpur	IEEE Xplore	https://doi.org/10.1109/ICCCNT49239.2020.9225609
Sangeetha Prasanna Ram, Jayalekshmi Nair , S V Suryanarayana , Laxman Singh Dhanu, Haladhara Naik & S Ganesan	V.E.S. Institute of Technology , Bhabha Atomic Research Centre (BARC)	July 2020	National	Journal	Indian Journal of Pure & Applied Physics	IJPAP	BHU, Varanasi	NISCAIR	
Saroj Desai, Nilima V	V.E.S. Institute of Technology	December 11-	International	Conference	First International	IOP Publishing Ltd	Bannari Amman Institute	ICCSSS 2020 IOP Conf.	doi:10.1088/1757-

Warke, Shivaji S Nawatake	, Mumbai and SIR Automation Industries, Navi Mumbai	12, 2020.			Conference on Circuits, Signals, Systems and Securities ICCSSS 2020		of Technology, Sathya mangala m, TamilN adu	Series: Materials Science and Engineering	899X/1084/ 1/012070
Aishwarya Salvi, Kanchan Chavan, P. P. Vaidya	V.E.S. Institute of Technology	15-17 June 2020	Internatio nal	Confere nce	4th Internati onal Confere nce on Trends in Electroni cs and Informat ics (ICOEI 2020)	IEEE	SCAD College of Engg & Technol ogy, Tirunelv eli, Tamil Nadu	IEEE Xplore	978-1-7281-5518-0
Harshal Katdare, Nilima Warke, Prakash Vaidya	V.E.S. Institute of Technology , Chembur	15-17 June 2020	Internatio nal	Confere nce	4th Internati onal Confere nce on Trends in Electroni cs and Informat ics (ICOEI 2020)	IEEE	SCAD College of Enginee ring and Technol ogy, Tirunelv eli,	IEEE Xplore	ISBN:978-1-7281-5519-7 DOI: 10.1109/IC OEI48184.2 020.914304 4

- **Other Achievements**

- **Patent**

Acade mic Year	Type of User	Patent - Application No	Patent - Application Date	Patent – Name	Patent - Inventor Name	Patent – Descripion	Patent - (Co-Inventor) If Any	Patent – Status
2020-21	Individual	201921042142	17th Oct, 2019 Publication date: 23th Oct 2020	Device for Common Mode Voltage Removal	Mrs. Nilima Warke, Dr. J.M.Nair, Dr. P. P. Vaidya	The present invention relates to electronic systems for reducing common mode voltage signals and more particularly to a system for common mode voltage removal having effective common mode rejection ratio (CMRR) without affecting differential voltage		Published

2020-21	Individual user	202121008470	01 March 2021	A novel wearable for detecting drowsiness among operator of heavy machinery/vehicles	Ashwin Balakrishnan Pillay, Aniket Lalji Bhadricha, Aditya Prasad Kale, Anchan Raj Bipin, Sangeetha Prasanna Ram	The present invention involves the design of a wearable that can be employed to detect drowsiness among operators of heavy machinery.		Provisional

- **Higher studies details for 2020-21:**

Instrumentation students got admitted for higher studies in Indian and foreign universities which include

Name of the Student	University	Field of Specialization
JOSHI MADHURA MAKARAND	Aston University, UK	MSc in Data Analytics
KESKAR YASH VIVEK	PGDM at XLRI, Jamshedpur	Post graduate diploma in management (bm)
MUNDRA MRADUL MANOJ	North-eastern University, USA	

- **Student Participation**
- **Industry Interactions**

Some of Instrumentation student do internship in various industries as well as various online/offline courses from Online Platforms

Sr.No.	Name of the Student	Title of Trainings/Courses	Oragnizing Institute/Industry	Period
1	Sarang kulkarni	Internship in unschool	Unschool ltd.	15 days
2	Pande Kartiki Hanumant	Internship at R.K control instruments Pvt Ltd.	Mentor: Mr Vikas Salve (production supervisor at RKCIPL) and Mr Prasad Godse (Assistant professor,VESIT)	20 days
3	Sahu Shivshankar Bhagaban	Internship in RCF	Rashtriya Chemicals and Fertilizers Limited	2 weeks
4	Sahu Shivshankar Bhagaban	Html/CSS Course	Pirple.com	1 week

5	Sahu Shivshankar Bhagaban	Industrial IOT on Google Cloud Platform	Coursera	7 weeks
6	Sahu Shivshankar Bhagaban	PLC	Tata Steel	1 day
7	Pranita Jadhav	Internship at Sierra instruments and control	Sierra instrumentation and controls	15 days
8	Sawant Soham Satish	Online Internship Automatus 2020 - Make Automation Yours	VCET (Vasai)	2 weeks
9	Swaraj Patil	Graphic Designer	XpertUp Technologies	4 months
10	Patil Sheetal Ramesh	Internship	Vidhyvardhini's college of engineering and technology.	2 weeks.
11	Mhatre Ritiksha	intern for fund raising	Hamari Pahachan NGO	1 week
12	Shirvaikar Advait	Microsoft AI Classroom Series	Microsoft, Futureskills	2 Days
13	Koshti Suyash Narendra	Interfacing with Ardiuno	online (Coursera)	4 weeks
14	Koshti Suyash Narendra	getting started with python	online (Coursera)	4 weeks
15	Koshti Suyash Narendra	Digital Manufacturing & Design	online (Coursera)	4 weeks
16	Koshti Suyash Narendra	Sensors & Sensor circuit design	online (Coursera)	4 weeks
17	Koshti Suyash Narendra	Sensor Manufacturing & Process Control	online (Coursera)	4 weeks
18	Dhopat Prajakta Deepak	Workshop on Cybersecurity and the Internet of Things	Coursera	6 weeks

| 19 | Kulkarni sarang balkrishna | Course on emotional intelligence | Make my life | 1 week |
| 20 | Shirvaikar Advait | Microsoft AI Classroom Series | Microsoft, Future skills | 2 Days |

● **Project Innovations**

Total five teams have participated from our department in IIC National Innovation Contest, the details of which is given in the table below:

Sr. No.	Title of Project	Team Lead	Team Members	Mentor	Stages of Selection
1	Smart Chair	Shubhangi Balasubramanian	Shubhangi Balasubramanian, Pranita Jadhav, Jagruti Sawalkar, Diksha Mishra	N. Gopalakrishnan	Selected in Idea, PoC & Prototype Stage
2	Automated Insulin Pump	Harsh Suvarna	Harsh Suvarna, Suhas Kamat, Varad Rane, Pranav Purushan	Mrs. Deepti Khimani	Selected in idea stage
3	Prediction of Covid-19 Cases in India using ARIMA Model	ADITYA GANESH	Aditya Ganesh, Prithvi Shetty, B. Shubhangi	Mrs. Deepti Khimani Dr. Machhindra patil	Selected in idea stage

4	Application of ML to identification of heart disease	Tanmay Shravge	Tanmay Shravge, Advait Shirvaikar, Advait Mandlik, Anjali Kothawade	Mrs. Sangeetha Prasanna Ram	Selected in idea stage
5	Smart Farmland Security System	Shreyas Kulkarni	Shreyas Kulkarni Swaraj Patil Shripad Joshi Mayuresh Cholkar Atharv Sawant		Participated in the competition

Intra College Activities

Our students participated in various National/College Level online Quiz Competitions and one day workshops.

Sr. No.	Name of the Student	Description of the Event	Organized by	Period	Level
1	Dhopat Prajakta Deepak	National Level Quiz on "Operating System"	VESIT	1 Hour	National
2	Lamboo Arfat Abdul Salam	Quiz	SORT VESIT	1hour	College
3	Priyanshu Rajesh Dubey	Online quiz	SoRT VESIT.	1 hour	College
4	Priyanshu Rajesh Dubey	Online quiz	VESIT LIBRARY	1 hour	College
5	Suhas Sanjay Kamat	Tech-Xpert Talks: VESIT Academia Industry Connect Program	VESIT Renaissance Cell and Industry partners of VESIT	10 days	National

6	Suyash Narendra Koshti	Microcontroller Board Development	ISA-VESIT	1 day	college
7	Maurya Rahul suresh	Seminar activities	VESIT tech xpert talk	2 hours	College
8	Pande Kartiki Hanumant	web automation	ISA-VESIT	2 days	college
9	Kulkarni Sarang Balkriahna	AI in Diabetic Retinopathy Screening	Iic-vesit	1 day	College
10	Suvarna Harsh	Solar literacy drive	Energy Swaraj Drive	7 days	College
11	Patil Sheetal Ramesh	App development workshop	ISA-VESIT	3 days	College

- **Extra-curricular activities**

Participation in Inter College Competitions, by Instrumentation students

Sr.No.	Name of the Student	Description of Event	Organizer & Venue	Period	Level
1	Lamboo Arfat Abdul Salam	Cultural	DIT CLUB, D.Y. Patil Pune.	1 hour	College
2	Kedari Sahil Arun	Open Automation Challenge	B&R Industrial Automation	1 week	State
3	Dhopat Prajakta Deepak	Quiz On Basics of MATLAB	JD COLLEGE OF ENGINEERING AND MANAGEMENT	1 hour	District
4	Dhopat Prajakta Deepak	Indoor Virtual Run	Run Buddies	1 hour	National
11	SUTAR NEHA BABURAO	PROGRAMMING WITH C WORKSHOP	ISA-RAIT Nerul	2 days	District

12	Kulkarni sarang balkrishna	"Importance of GATE, ESE, and opportunities	Samarth Group of Institutions	1 day	District
10	Suvarna Harsh	Solar literacy drive	Energy Swaraj Drive	7 days	District
11	Kulkarni Sarang Balkrishna	Basics of industrial transducer	Vpm thane	1 day	District