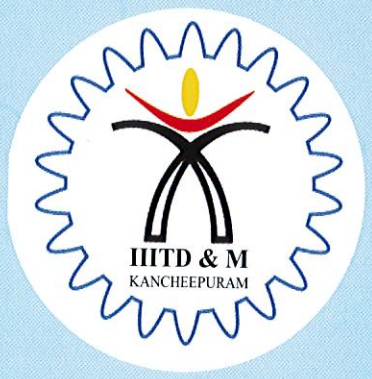


ANNUAL REPORT

2018-19

FORMATION TECHNOLOGY
TURING, KANCHEEPURAM

INDIAN INSTITUTE OF IN
DESIGN AND MANUFACT

Contents

Director's Message (2018-19)

Greetings from the IIITDM Kancheepuram family. It gives me immense pleasure and satisfaction in bringing out this summary report of the progress of our institute since my taking over in 2017 and the key achievements of the institute since its inception in 2007. The institute setup with a unique mandate of excelling in IT and IT enabled design and manufacturing pedagogy and research has steadfastly focused on offering engineering programmes with unique flair of design and manufacturing related courses in the respective engineering domains.

The institute has witnessed steady growth in terms of infrastructure, teaching learning and research resources since 2007. The past two years has seen a focused and measured growth in the human resources viz faculty and student. Presently the institute regular faculty strength is around 50 for around 1500 students pertaining to UG, PG and Ph.D programmes. The recent curriculum revision initiatives of the institute have seen the introduction of courses such as Problem Solving and Computer Programming, Data Structure Fundamentals & Logical Thinking to enhance the problem solving and automation abilities of students from the various engineering streams. The curriculum also lays emphasis on Design & Manufacturing, with common courses such as Concepts in Engineering Design, Design Realization, Sociology of Design, and Intelligent Product Design to enhance the Design thinking amongst our graduates. The curriculum also encourages students to pursue inter-disciplinary projects involving multiple engineering issues to be addressed. The course on Product Design & Prototyping serves as the feeder in this regard with students from the core streams of Computer, Electronics & Mechanical Engineering together developing novel products incorporating both engineering and design cum manufacturing skills imparted in the curriculum.

In line with the institute mandate, the Institute's Teaching Learning Centre (TLC) supported by the Pandit Madan Mohan Malviya National Mission on Teachers & Training of the GoI develops e-learning resources and creates simple yet powerful Do It Yourself (DIY) and Build Your Own (BYP) low cost laboratory equipments for adoption and use by engineering colleges and universities in the country. The centre has conducted several workshops for the benefit of the institutions who have adopted the low cost models developed by IIITDM Kancheepuram – TLC. The institute has signed a MoU with SRF Foundation and Cognizant solutions to supply some low-cost devices to various schools in Chennai and Bangalore through TLC. TLC has conducted various training programmes for school and college students in this year. TLC at IIITDM has been declared as "National Resource Centre (NRC)" on Design and Manufacturing.

The institute incubation cell MaDeIT presently supports 8 start ups working on state of the art problems. One incubate has successfully graduated from the institute and the centre conducts workshops for CEO's of various SME's in and around Chennai. The institute also houses a Design

Innovation Centre (DIC), established in the year 2017 with 1.5 crore grant from DST, GoI. The cell inculcates, facilitates and spreads the idea of Design Thinking & Innovation among students and faculty of the institute and conducts workshops on this theme for the benefit of neighboring colleges and institutes. Centre for AI, IoT and Robotics and Centre for Smart Manufacturing are the two Centres of Excellence being established by Institute this year to focus on R&D activities in these niche areas.

The Institute recently conducted its Sixth Convocation with Dr Pramod Kumar Mishra, Additional Principal Secretary to Prime Minister serving as the Chief Guest and our Chairman BoG, Prof M S Ananth, presiding over the event. In the convocation ceremony, the Director awarded degrees to 116 UG, 29 PG and 4 Ph D students, totaling 149 graduates. The accolades to the winners of various categories of awards were awarded by the Chief Guest. Further to the growth of the alma matter of the institute, recent convocations have seen the successful organization of Alumni Meets and it gives a sense of immense satisfaction to record the noteworthy contributions of our alma matter, both on the technical and alumnus corpus fronts. A corpus of around 10 lakhs has been created by the Alma matter in its recent efforts which would be put to use for the benefit of the students and the institute. I am confident that with the increasing number of graduates passing out from the institute in the coming years, the contributions and the importance of the Alumni cell will only grow further. Recent years have also witnessed significant rise in the research funding for various projects pursued by the institute faculty members, funded by Government and Private agencies. Institute has received sponsored projects of worth Rs. 2.5 Crore from various agencies and Industrial consultancy of Rs 12 Lakhs has been undertaken by our faculty for various industries.

It is also a sense of fulfillment to put on record that the institute placement has considerably improved with the average and maximum package for our graduates going up and the number of core companies visiting the campus for placements and internship has also steadily increased. A sizeable number of graduates have been successful with Pre Placement Offers (PPO's) further to the mandatory 5 month internship programme in the curriculum. On the infra structure front, the construction of Faculty Housing is nearing completion and become operational from the beginning of the next academic year which would enhance the academic and research ambience in the campus. On a holistic note, the institute has seen steady and significant growth in the academic, research and student activities front and I am confident that with the increased faculty resources, state of the art equipments and labs and the continued support of the Ministry of HRD, the institute would scale further greater heights in the form of a recognized IIITDM Brand known for its novel Design & Manufacturing skills equipped graduates, novel and innovative products from the various labs of the institute and contribute to the society and country at large.

Prof. Banshidhar Majhi
Director

01

General Information

Vision

To become a premier institution of excellence in Design and Manufacturing that would create and develop a new generation of engineers and technologists with the ability and mindset to lead Indian industries in globally competitive economic environment.

Mission

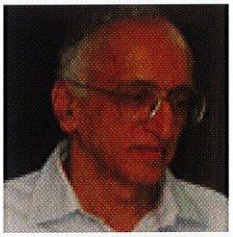
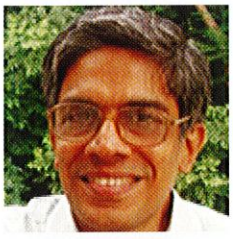
To be a world class apex centre of excellence in education, research, development and training in Design and Manufacturing.

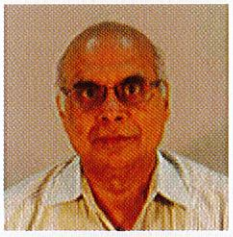
Charter

- To provide education and training, at both undergraduate and postgraduate levels, to persons of outstanding abilities who would provide leadership to Indian industry in globally competitive economic environment.
- To carry out advanced research and development activities in design and manufacturing technologies, both on its own and on sponsorship basis for the industry.
- To provide distance learning and continuing education programmes for faculty / scholars from other institutions and industry personnel.
- To organize conferences, seminars, workshops and such other activities for the dissemination of knowledge to industry.

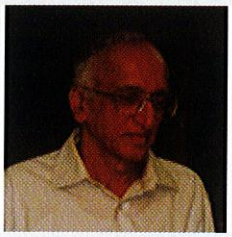
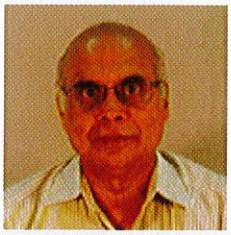
The full fledged campus of IIITDM Kancheepuram

Board of Governors

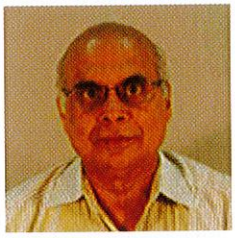
Title		Name	Affiliation
Chairman		Prof M S Ananth	Former Director IIT Madras
Member		Shri BS Raghavan	Former Advisor to UN, Author & Educationist Former Chief Secretary Govt. of TN
Member		Shri Santhosh Babu, IAS	Secretary to Government Dept of Information Technology, Govt. of TN
Member		Prof Bhaskar Ramamurthi	Director IIT Madras
Member		Dr. Jaideep Kumar Mishra	Joint Secretary (HRD), Ministry of Electronics and Information Technology, Govt. of India
Member		Shri B Santhanam	President – Flat Glass, South Asia, Egypt, Managing Director Saint Gobain Glass

Title		Name	Affiliation
Member		Shri Krishna GV Giri	Former Managing Director & Vice Chairman, Accenture
Member		Prof David Koilpillai	Dean (Planning) IIT Madras
Member		Prof S Narayanan	Emeritus Professor IIITDM Kancheepuram
Member & Secretary i/c		Prof. Banshidhar Majhi	Director & Registrar i/c IIITDM Kancheepuram

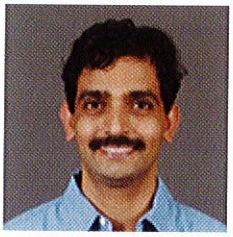
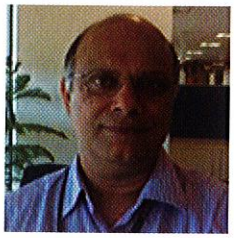
Finance Committee

Title		Name	Affiliation
Chairman		Prof M S Ananth	Chairman BoG, IIITDM Kancheepuram
Member		Prof. Banshidhar Majhi	Director & Registrar i/c IIITDM Kancheepuram
Member		Dr S Murugiah	Former Principal Acct General, TN
Member		Shri Anil Kumar	Director (Finance), MHRD, GoI
Member		Prof S Narayanan	Emeritus Professor IIITDM Kancheepuram
Member		Mr A Chidambaram	Deputy Registrar (Accounts), IIITDM Kancheepuram

Building and Works Committee

Title		Name	Affiliation
Chairman		Prof. Banshidhar Majhi	Director & Registrar i/c IIITDM Kancheepuram
Member		Prof S Narayanan	Emeritus Professor, IIITDM Kancheepuram
Member		Prof P Alagusundarmoorthy	Professor, Dept of Civil Engineering, IIT Madras
Member		Shri P. Suresh Kumar	Supt Engineer, TNEB- TANGEDCO Chennai
Secretary		Shri. K. Sundaresan	Consultant Engineer (Civil), IIITDM Kancheepuram

Senate

Title		Name	Affiliation
Chairman		Prof. Banshidhar Majhi	Director & Registrar i/c IIITDM Kancheepuram
Member		Prof P Chandramouli	Professor, Dept of Mech Engg, IIT Madras
Member		Prof V Jagadeesh Kumar	Professor, Dept of Electrical Engg, IIT Madras
Member		Prof Krishnamoorthy Sivalingam	Professor, Dept of Computer Engg, IIT Madras
Member		Dr G Venkatesh	M/s Sasken Communication Tech Ltd
Member		Dr Anand Lakshmanan	M/s Ericsson India Global Services

Title		Name	Affiliation
Member		Dr S Rajasekara Pandian Dean (Plannig)	Associate Professor IIITDM Kancheepuram
Member		Dr Sudhir Varadarajan Dean (Design, Innovation and Incubation)	Visiting Faculty, IIITDM Kancheepuram
Member		Dr Sreekumar Dean (Faculty Affairs)	Associate Professor IIITDM Kancheepuram
Member		Dr Binsu J Kailath Dean (Academics)	Associate Professor IIITDM Kancheepuram
Member		Dr Selvaraj M.D. Dean (Sponsored Research)	Associate Professor IIITDM Kancheepuram
Member		Dr Naveenkumar Vats Dean (Student Affairs)	Associate Professor IIITDM Kancheepuram

Title		Name	Affiliation
Member		Dr Selvajyothi K. HoD (ECE)	Assistant Professor IIITDM Kancheepuram
Member		Dr Jayavel S HoD (Mechanical Engineering)	Associate Professor IIITDM Kancheepuram
Member		Dr Sadagopan N HoD (CSE)	Assistant Professor IIITDM Kancheepuram
Member		Dr Tapas Sil HoD (Physics)	Associate Professor IIITDM Kancheepuram
Member		Dr Vijayakumar S HoD (Mathematics)	Assistant Professor IIITDM Kancheepuram

Institute Administration

	Name	Affiliation
	Prof. Banshidhar Majhi Director	Director, IIITDM Kancheepuram
	Dr S Rajasekara Pandian Dean (Planning)	Associate Professor IIITDM Kancheepuram
	Dr Sudhir Varadarajan Dean (Design, Innovation and Incubation)	Visiting Faculty, IIITDM Kancheepuram
	Dr SreeKumar Dean (Faculty Affairs)	Associate Professor IIITDM Kancheepuram
	Dr Binsu J Kailath Dean (Academics)	Associate Professor IIITDM Kancheepuram
	Dr Selvaraj. M.D. Dean (Sponsored Research)	Associate Professor IIITDM Kancheepuram

Title	Name	Affiliation
	Dr Naveenkumar Vats Dean (Student Affairs)	Associate Professor IIITDM Kancheepuram
	Dr Selvajyothi K. HoD (ECE)	Assistant Professor IIITDM Kancheepuram
	Dr Jayavel S HoD (Mechanical Engineering)	Associate Professor IIITDM Kancheepuram
	Dr Sadagopan N. HoD (CSE)	Assistant Professor IIITDM Kancheepuram
	Dr Tapas Sil HoD (Physics)	Associate Professor IIITDM Kancheepuram
	Dr Vijayakumar S HoD (Mathematics)	Assistant Professor IIITDM Kancheepuram

Administrative Staff

Shri A Chidambaram
Joint Registrar

Shri R Gunasekaran
DR (Administration)

Shri. K. Sundaresan
Consulting Engineer

Shri G Ravi Kumar
Assistant Registrar

Shri K Chandrasekaran
Internal Audit Officer

Shri M V R Seshagiri
Corp Relation
Officer

Smt S Rajalakshmi
Junior Superintendent

Kum G Subashini
Junior Superintendent

Shri S Pandiyan
Junior Engineer (Civil)

Shri Ramkumar R
Junior Engineer (Electrical)

Shri P Alaguraj
Physical Training
Instructor

Shri G Perumal
Senior Lib Info Asst

Shri R Parthasarathy
Senior Assistant

Shri S Karthikeyan
Junior Assistant

Smt P Kavitha
Junior Assistant

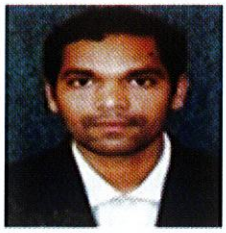
Shri K Dinesh Kumar
Junior Assistant

Shri G Venkatesh
Junior Assistant

Shri R Balaji
Junior Assistant

Technical Staff

Shri. C. Gurunathan
Technical Officer



Shri. P. M. Sriram Bhaskar
Jr. Tech. Suptd

Shri. K. Saravana Kumar
Jr. Tech. Suptd.

Shri. A. Vigneshwaran
Jr. Tech. Suptd

Smt. K. Manimegalai
Junior Technician

Shri. G. Manigandan
Junior Technician

Shri. M. Ashwinraj
JuniorTechnician

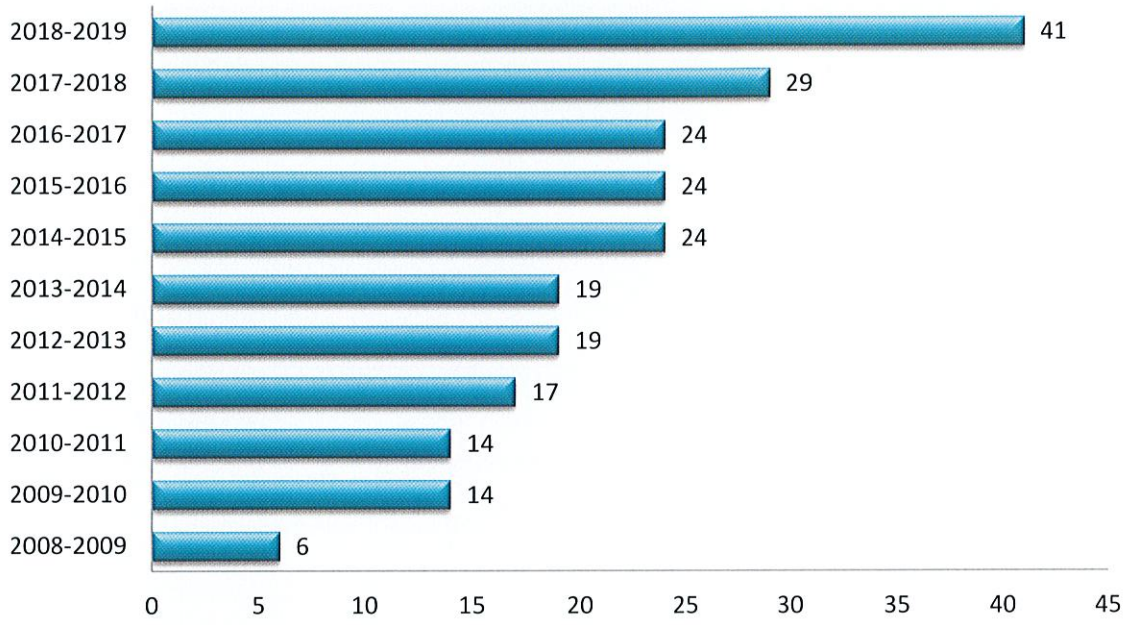
Kum. P. Pavithra
Junior Technician

Shri. R. Dharmarasu
Junior Technician

Shri. K. Kanagaram
Junior Technician

Shri A Vijaya Bharathi
Junior Technician

Cumulative Faculty (Regular) Strength



Administrative Responsibilities for Faculty 2018-19

Portfolio	Incharge	PIC	Co – PIC
Academics	Dean (Acad)	Dr. Jayabal K	Dr. Nil Kamal Hazra
Research Activities		Dr. Prem Kumar K	Dr. Nachiketa Mishra
Disciplinary Committee (Academics)		Dean (Acad) (Chairman)	All HoDs
Guidance and Counseling		Dr. Jayabal K	Dr. Gowthaman Swaminathan Dr. Prerna Saxena
Placements		Dr. Raja B	Dr. Prerna Saxena
All Ranking & Survey (NIRF Ranking/AISHE, etc.)		Dr. Prem Kumar K	Dr. Sivaprasad AVS
Library		Dr. Damodharan P	Dr. Vivek Kumar
Disciplinary Committee (Hostel)	Dean (SA)	Dean (SA) (Chairman)	All wardens, Dr. Sadagopan N Dr. Umarani J
Sports		Dr. S. Jayavel	Dr. Vijayakumar K Dr. Munesh Singh
Hindi Section		Dr. Naveenkumar	Dr. Shubhankar Chakraborthy
Scholarship		Dr. S. Jayavel	Dr. Anushree Purushottam Khandale
Social Service Group		Dr. Vijayakumar K	Dr. Asutosh Kar
Anti Ragging & Student body		Dr. Masilamani V	All wardens Dr. Chitti Babu . B

Portfolio	Incharge	PIC	Co – PIC
Cultural activities	Dean (SA)	Dr. Priyanka Kokil/ Dr. Umarani. J	Dr. Shubhankar Chakraborthy
Weaker section		Dr. P Pandithevan	Dr. Anushree Purushottam Khandale
OBC Coordinator		Dr. Damodharan P	
Designers Club		Dr. K. Selvajyothi	Dr. Gowthaman Swaminathan Dr. Chitti Babu . B Dr. Munesh Singh
Web Page	Dean (FA)	Dr. Senthil Kumaran K	Dr. Vijayakumar K Dr. Nil Kamal Hazra Dr. Kumar Prassanajit pradhan Dr. Jagadeesh Kakarla
Institute Mail Administration		Dr. Siva Selvan B	Dr. Munesh Singh Dr. Kumar Prassanajit pradhan
Networking		Dr. Noor Mahammad SK	Dr. Jagadeesh Kakarla
News Letter (Margdarshan)		Dr. Jayabal K	Dr. Jayachandra Bingi
Stores and Purchase Committee		Dr. Siva Selvan B	Dr Binsu J Kailath, Dr.K. Jayabal
Infrastructure Advisory Committee		Dean (FA)	Dr. Chitti Babu . B
Sponsored Research and Continuing Education	Dean (SR)	Dr. Venkata Timmaraju Mallina	Dr. Vijayakumar K
Conferences/Workshops/ Short Term Courses/Invited Lectures/Industrial Visit			Dr. Chitti Babu . B
QIP			Dr. Sivaprasad AVS
Accreditation		DrJayavel S	Dr. Gowthaman Swaminathan

Portfolio	PIC	Co – PIC
TBI Centre & Industry Interaction	Dr. Sudhir Varadharajan	Dr. Jayachandra Bingi Dr. Jayavel Dr. Karthic Narayanan Dr. Vivek Kumar Dr. Neelkamal Hazra Dr. Sivaprasad Dr. Gowthaman Swaminathan
Teaching and Learning Centre	Dr. S R Pandian	Dr. Masilamani V Dr. Senthil Kumaran K, Dr. Venkata Timmaraju Mallina Dr. Munesh Singh Dr. Shubhankar Chakraborthy
Design Innovation Centre	Dr. Naveenkumar	Dr. Chitti Babu . B Dr. Asutosh Kar Dr. Munesh Singh Dr. Jagadeesh Kakarla Dr. Kumar Prassanajit pradhan

Portfolio	PIC	Co – PIC
Centre for AI, IoT and Robotics	Dr. M Sreekumar	Prof Banshidhar Majhi Dr Sreekumar Dr Naveen Dr SR Pandiyan Dr Masilamani Dr Jagadeesh Dr Munesh Singh Dr Vijayakumar Krishnasamy Dr Deepakranjan (PDF)
Centre for Smart Manufacturing	Dr. Senthil Kumaran K	Dr. Senthil Kumaran K Dr. Subhankar Chakrobarti Dr. S Vijayakumar Dr Munesh Singh Dr. Sudhir Varadarajan

Hostel

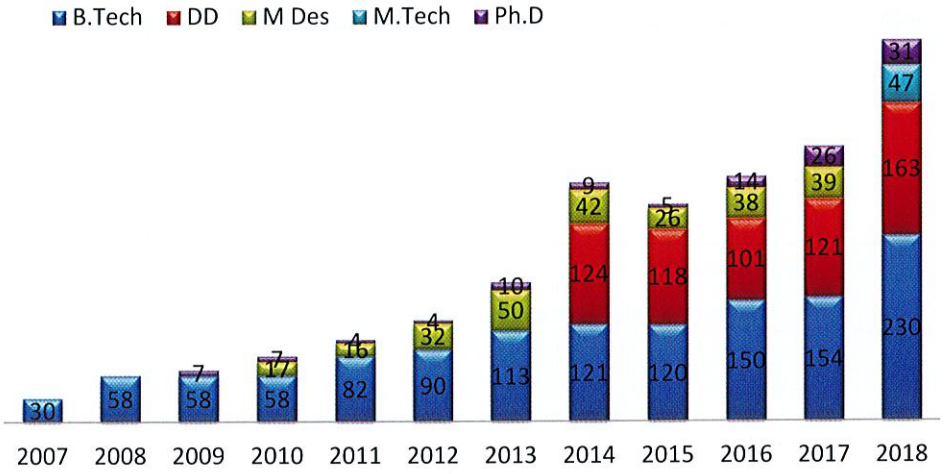
Chief Warden	Dr. Masilamani V
Warden	Warden Dr. Jagadeesh Kakarla Dr. Anushree Purushottam Khandale

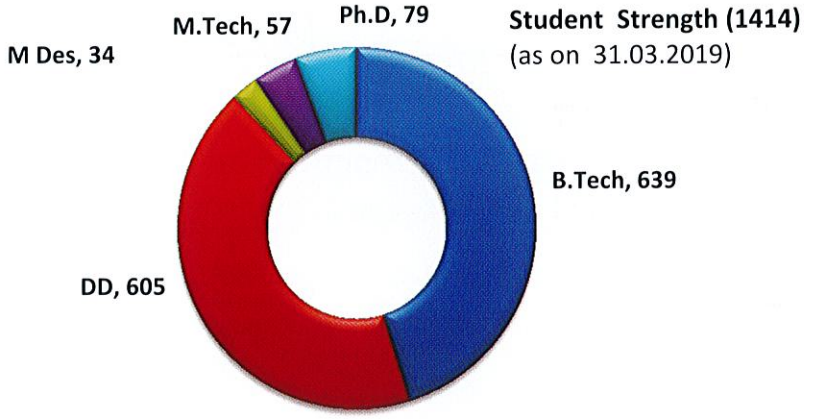
Campus Demography

Student Strength as on 31.03.2019

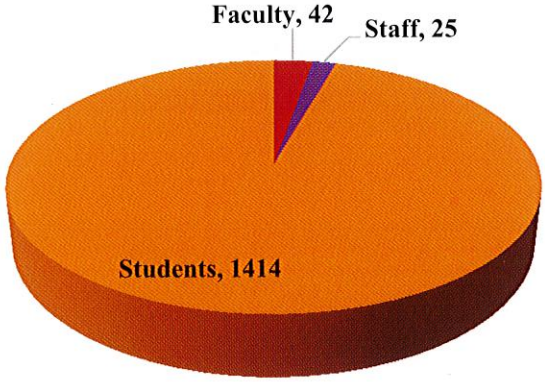
Degree Name	2010	2013	2014	2015	2016	2017	2018	Grand Total
B Tech				118	147	144	230	639
COE				40	40	44	61	185
EDM				38	39	34	55	166
MDM				40	37	37	58	172
MSM					31	29	56	116
DD			118	114	97	113	163	605
CED			45	40	41	41	54	221
ESD			17	19	11	19	27	93
EVD			19	20	16	18	29	102
MFD			18	18	15	20	26	97
MPD			19	17	14	15	27	92
M Des						34		34
CDS						8		8
eds						11		11
mds						15		15
M. Tech						10	47	57
CDS							10	10
eds							10	10
mds							14	14
SMT						10	13	23
Ph. D	1	2	4	3	14	24	31	*79
COE				1		3	8	12
EDM			3	1	5	9	9	27
MAT					1		4	5
MDM	1	1	1	1	7	12	5	28
PHY		1			1		5	7
Grand Total	**1**	**2**	**122**	**235**	**258**	**325**	**471**	**1414**

Student Admission



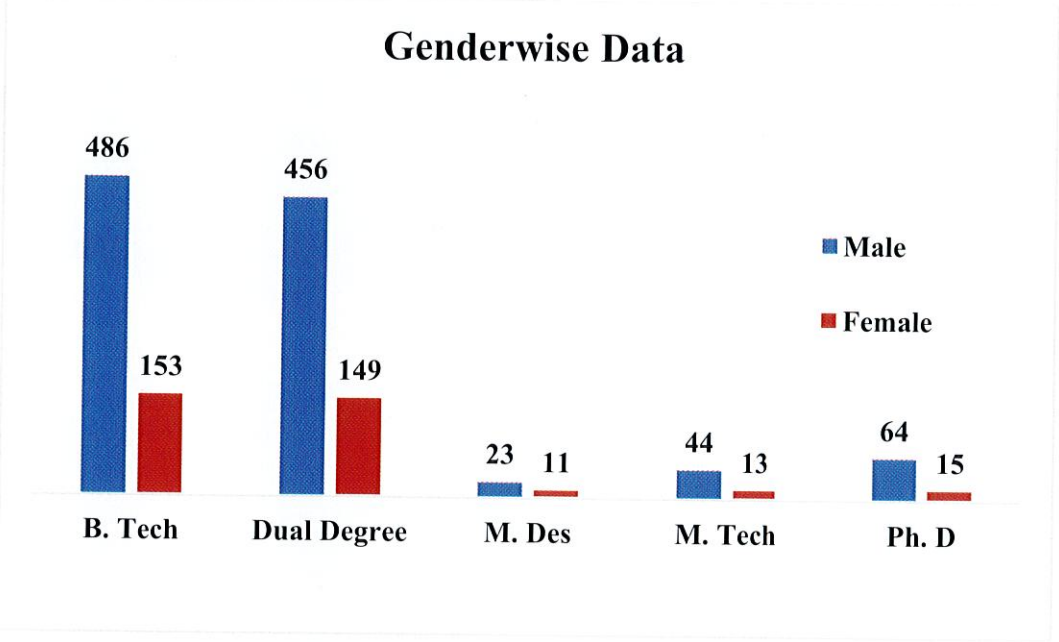


Campus Population



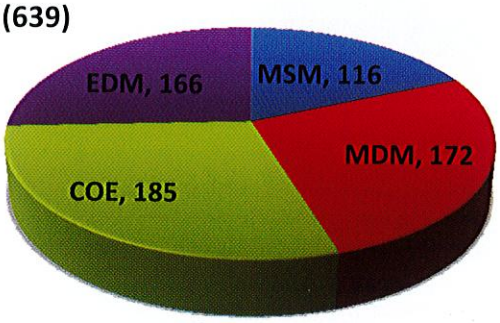
Category wise Student Distribution (as on 31 March 2019)

Category	B Tech	DD	M Des	M. Tech	Ph. D	Grand Total
DASA	11	24				35
OBC	178	163	10	15	32	398
OP	308	282	17	30	39	676
SC	95	88	6	10	8	207
ST	47	48	1	2		98
Grand Total	**639**	**605**	**34**	**57**	**79**	**1414**

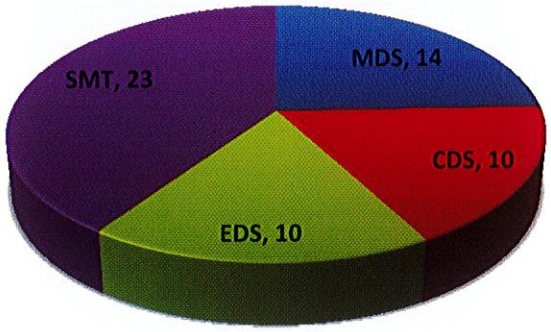


Specialization Wise Student Distribution

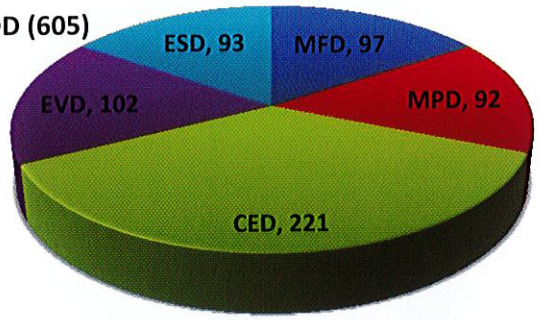
B. Tech (639)



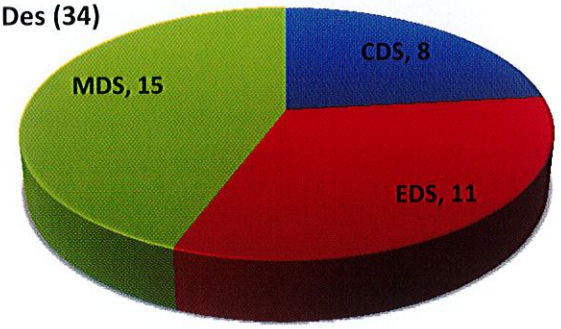
M.Tech (57)



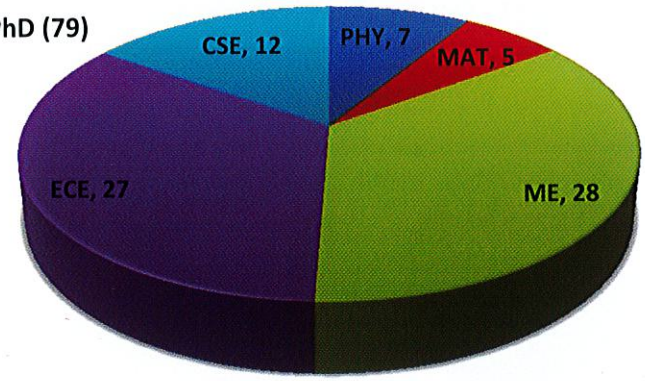
DD (605)



M Des (34)

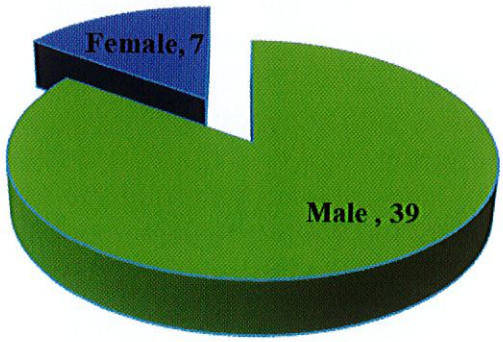


PhD (79)

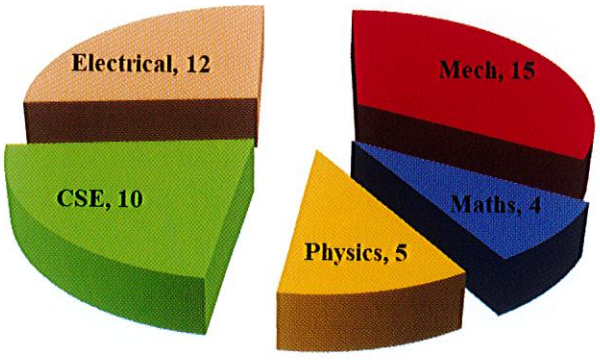


Faculty Information

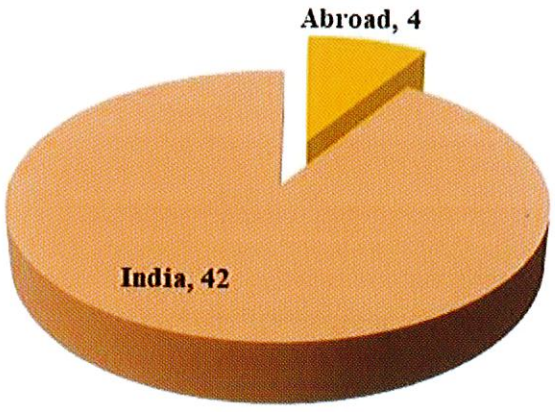
Gender wise Distribution of Facutly



Department wise of Distribution of Faculty



Degree



02

Academics-General

Design-Centric Academic Programs

At IIITDM Kancheepuram,the academic programmes were crafted after a series of brainstorming sessions with industry experts and renowned academicians from various regions and expertise in various fieldsto bridge the gap between the academia and industry. In these modern times,many young engineers graduating from educational institutions possess fundamental knowledge but find it difficult to apply their knowledge to solve real-world problems. The innovative design management that will help them to be more innovative and industry ready and fulfil the role of a design and manufacturing engineer. Design, Manufacturing, and Product Development are integral part of each programme in the institute and basically satisfythe following criteria:

- **Societal impact** - Engineering's primary value to society is the ability to deliver products and solutions that improve quality of life. Other benefits shall include enhanced comfort, safety, convenience, cost-effectiveness, usability, functionality, and marketability. The curriculum is enriched with interdisciplinary courses blended with management, environment professional ethics science, etc. In addition, students have to design and develop a product or prototype as a part of their course works as most of the courses are integrated with practice sessions.
- **Intellectual challenges** –For any product to be competitive technically and economically, it must incorporate the appropriate latest technologies and to be refined using leading-edge modelling, simulation, and experimental methods. The curriculum imparts strong fundamental knowledge in basic sciences and engineering to the students so that the students can tackle complex design problems

Academic Programs Offered

The motto of the institute is "Learning by Doing". It is put into practice in IIITDM Kancheepuram in terms of its teaching. The institute envisages significant amount of emphasis for practice courses as theoretical concepts are explored along with the relevant laboratory courses. All the programs are highly interdisciplinary and students are free to choose their specializations. The institute also follows its vision of developing engineers with design and manufacturing skills. The following are the programmes currently being offered by IIITDM Kancheepuram.

B. Tech

Computer Science and Engineering
Electronics and Communication Engineering
Mechanical Engineering
Smart Manufacturing

M. Tech

M. Tech. in Mechanical Engineering with Specialization in Mechanical Systems Design
M. Tech. in Electronics and Communication Engineering with Specialization in Electronics Systems Design
M. Tech. in Electronics and Communication Engineering with Specialization in Communication Systems Design
M. Tech. in Mechanical Engineering with Specialization in Smart Manufacturing

Dual Degree (B Tech + M Tech)

B Tech Computer Science and Engineering and M.Tech Computer Science and Engineering
B. Tech. Electronics and Communication Engineering and M. Tech. in Electronics and Communication Engineering with Specialization in VLSI Design
B. Tech. Electronics and Communication Engineering and M. Tech. in Electronics and Communication Engineering with Specialization in Communication Systems Design
B. Tech Mechanical Engineering and M. Tech. in Mechanical Engineering with Specialization in Product Design
B. Tech Mechanical Engineering and M. Tech. in Mechanical Engineering with Specialization in Advanced Manufacturing

Ph. D

All Basic Sciences and Engineering

Academic Milestones

2017 M Tech
Smart Manaufacturing

2016 B Tech - 40
Smart Manaufacturing

2015 Mentoring IIITDM
Kurnool with 50 Intake

2014 Dual Degree Programs
Intake 120

2013 UG intake
(Increased to 120)

2012 M Des
(Commn. Systems)

2011 UG intake
Increased to 90

2010 M Des
(Mech & Electronics)

2009 B Teach - 20
(Computer Engg.)

Doctoral (Ph D)

2008 B Teach - 20
(Electronics D & M)

2007 B Tech - 30
(Mechanical D & M)

Fee Structure for the New Admisssions (2018 Batch)

Description	B.Tech/ DD	M. Tech	Ph.D.
I. Institute Fees			
A. One time Fees:			
Admission Fee	500	500	500
Certificate/Thesis Fee	500	500	1500
Student welfare fee	1000	1000	1000
Infrastructure Development Fee	1000	1000	1000
Alumni Life Membership Fee	500	500	500
Publication Fee / Library Fee	1000	1000	1500
Cultural Fee	500	500	-
Total (A)	5000	5000	6000
B. Semester Fees:			
Tuition fee +	54000	25000	21000
Examination fee	500	500	500
Registration	300	500	500
Sports Fee	1000	1000	1000
Medical Fee	1000	1000	1000
Student Amenities	2000	2000	3000
Total (B)	58800	30000	27000
C. Medical Insurance Premium (per annum)			
Medical Insurance premium p.a.	575	575	575
Total (C)	575	575	575
Grand Total [A+B+C]	64375	35575	33575
II. Hostel Fees			
A. Hostel Fees & Mess Charges per semester			
Hostel Admission fee	700	700	700
Hostel Seat Rent	2000	2000	2000
Hostel Maintenance Charges	7500	7500	7500
Advance dining charges	14000	14000	14000
Establishment B Charges	500	500	500
Total (A)	24700	24700	24700
Hostellers	89075	60275	58275

Note:

1. *SC/ST students are exempted from payment of tuition fee irrespective of their parental income.
2. Hostel is compulsory for all B Tech/DD students. If exemption is granted by the Institute, then day scholars will have to pay the above mentioned Institute fees (Except Hostel Fees).

03

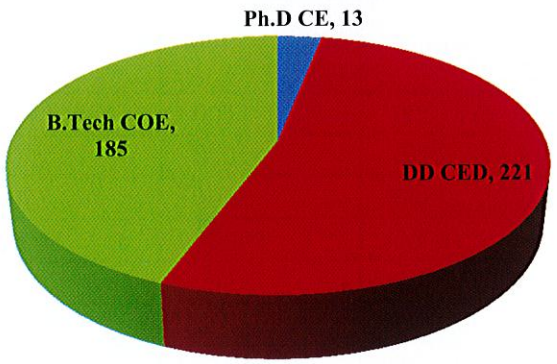
Academic Streams

Computer Science and Engineering

The first of its kind engineering programs offered in India with a right blend of courses from computer and electronics streams, the B.Tech and Dual Degree Computer Science and Engineering curriculum at IIITDM Kancheepuram are modelled on the ACM (Association for Computing Machinery) recommendations. These programs are aimed at producing engineers equipped with skills required for developing efficient hardware-software interaction. In addition to courses offered by the conventional Computer Science curriculum, these novel programs offer core courses such as Embedded Systems, Human Computer Interaction, Simulation & Modelling, Signals & Systems, Product Design etc., that equip the students with both computing and electronics engineering skills very much required for the successful creation of products requiring hardware-software interactions

B Tech (4 Years)	Computer Science and Engineering
Dual Degree (5Years)	B Tech Computer Science and Engineering and M.Tech Computer Science and Engineering
Ph D	Computer Science and Engineering and Allied Areas

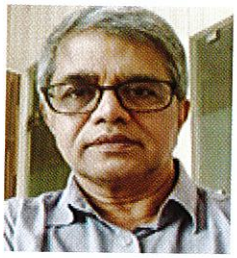
STUDENT STRENGTH-CSE



Laboratories

- Digital and Analog Circuits Design
- Object Oriented Algorithm Design and Analysis
- Database Systems
- Computer Organization and Design
- Computer Networking
- Operating Systems
- VLSI System Design
- Computer Architecture
- Embedded Systems
- Product Design

Faculty

	**Banshidhar Majhi** **PhD (NIT Rourkela)** Research Interests: Image Processing, Data Compression, Cryptography and Security, Parallel Computing and Soft Computing		**Masilamani V.** **PhD (IIT Madras)** Research Interests: Image Processing, Computer Vision, Data Structures and Algorithms
	**Noor Mahammad S. K.** **PhD (IIT Madras)** Research Interests: Software for VLSI Design, Evolvable Hardware, Open Flow Networks, Network-on-Chip (NoC)		**Sivaselvan B.** **PhD (NIT Trichy)** Research Interests: Knowledge and Data Engineering, Usability Engineering, Human Computer Interaction
	**T.S.Narayanan (Hari)** **Ph.D (Concordia** **University,Cannada)** Research Interests: Big Data & Data Mining, Internet of Things, Software Defined Net- works, Mobile Networks, Cloud Computing and Information Security		**Vasumathi K Narayanan** **(Concordia University,** **Cannada)** Research Interests: Formal methods, Automata, Concurrency Theory, Temporal Logics, Model-checking algorithms and analysis
	**Umarani J.** **PhD (IIT Kanpur)** Research Interests: Biometrics, Pattern Recognition, Computer Vision and Digital Image Processing		**Sadagopan N.** **PhD (IIT Madras)** Research Interests: Graph Theory and Combinatorics, Data Structures and Algorithms, Computer Networks, Database Systems
	**Jagadeesh Kakarla** **PhD (NIT Rourkela)** Research Interests: Wireless Sensor Networks,Adhoc Networks and Internet of Things		**Munesh Singh** **PhD (NIT Rourkela)** Research Interests: WSNs, IOT, Robotics, Connected Cars, Cloud Computing, and Sensors

Research Scholars	Topic of Research
Isunuri B Venkateswarlu	Medical Image Processing
Joshi Pratik	Machine Learning Approaches for Abnormal Activity Detection Using Video Surveillance
Kiruthika S	Machine Learning Algorithms for Image / Video Quality Prediction
Mahendra Kumar R	Study of Some Special Graph Classes
Mohanapriya	Theoretical Computer Science
N Viswanathan	Study of Some Special Graph Classes
Nilu R. Salim	Image Processing and Biometrics
Sameera Shaik	Network Intrusion Detection Systems
Santosh Kumar Uppada	Data Mining / Analysis
Shree Prakash	Machine Learning , Pattern Recognition, Digital Image Processing
Subin Sahayam M	Machine Learning and Medical Image Processing
Vegesna S.M. Srinivasavarma	High Performance VLSI Architectures and Algorithms for Multimatch Packet Classification for Network Intrusion Detection Systems
S Veeramani	Novel High Speed IP Lookup Techniques

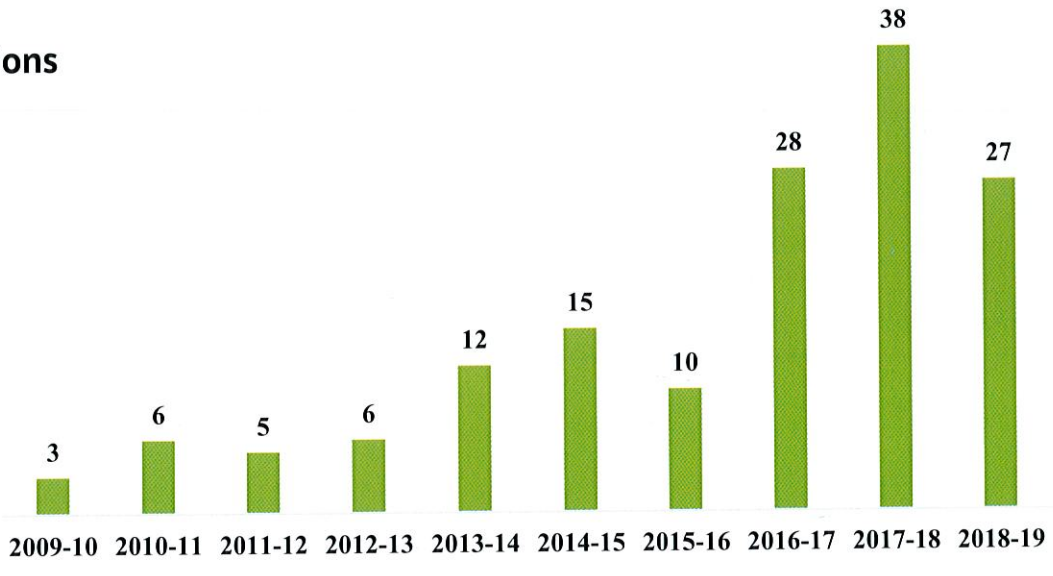
Core Courses

- Digital and Analog Circuits Design
- Object Oriented Algorithm Design and Analysis
- Database Systems
- Computer Organization and Design
- Computer Networking
- Operating Systems
- VLSI System Design
- Computer Architecture
- Embedded Systems
- Data Structures and Algorithms

Elective Courses

- Wireless Communication
- Data Communication Networks
- ElectromagneticInterference and Compatibility
- Design of SMPS
- VLSI Data Converters
- Advanced Communication Networks

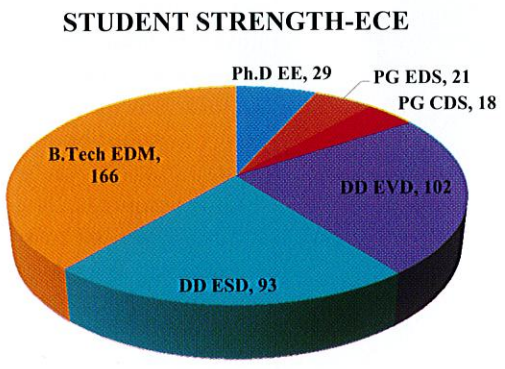
Publications

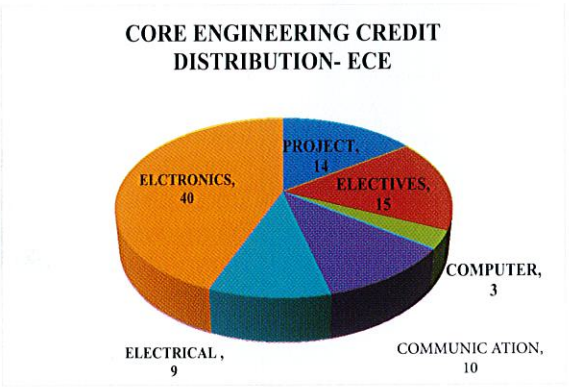


Electronics and Communication Engineering

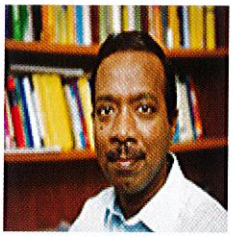
In today's competitive scenario, electronic product design and development requires the skillful blend of expert hardware and software engineering knowledge with a spirit of creativity and innovation, tempered by the practical concerns of manufacturability, cost consciousness and reliability. The Undergraduate (B.Tech), Dual Degree (B.Tech + M. Tech) and Postgraduate (M.Tech) programs offered are designed to provide advanced theoretical and practical knowledge on all aspects relevant to design, development and production of modern electronic systems. The innovative programs offered supplement the conventional core curriculum courses with specialized design courses required for practicing designers both from product design and domain areas.

B Tech	Electronics and Communication Engineering
Dual Degree (5Years)	**B. Tech.** Electronics and Communication Engineering and M. Tech. in Electronics and Communication Engineering with Specialization in VLSI Design **B. Tech.** Electronics and Communication Engineering and M. Tech. in Electronics and Communication Engineering with Specialization in Communication Systems Design
M Tech	**M. Tech.** in Electronics and Communication Engineering with Specialization in Electronics Systems Design **M. Tech.** in Electronics and Communication Engineering with Specialization in Communication Systems Design
Ph D	Electronics and Communication Engineering





Faculty

	**Binsu J. Kailath** PhD (IIT Madras) **Research Interests:** VLSI Design, MOS Device Modeling and Technology, MEMS		**Priyanka Kokil PhD** (NIT Allahabad) **Research Interests:** Nonlinear System, Delayed System, Multidimensional System
	**Damodharan P.** PhD (IIT Madras) **Research Interests:** Power Electronics and Drives, Permanent Magnet Brushless DC and AC Drives		**Selvajyothi K.** PhD (IIT Madras) **Research Interests:** Power Electronics, Drives and Control, DSP Realization of Control Algorithms in Power Electronics, FPGA/DSP Hardware
	**S. R. Pandian** PhD (IIT Delhi) **Research Interests:** Autonomous Underwater Robots, Robot Design, Electromechanical Systems		**Selvaraj M. D.** PhD (IIT Delhi) **Research Interests:** Wireless Communications, Cooperative Diversity, Mobile Communications
	**Premkumar K.** PhD (IISc Bangalore) **Research Interests:** Scheduling in Networks, Social Networks, Cognitive Radio, Internet of Things, Big Data Analytics		**Asutosh Kar** Ph.D (BIT Mesra) **Research Interests:** Advanced Signal Processing, Adaptive Filter Theory, Acoustic Echo and Feedback Signal Analysis, Hearing-Aids, Acoustic Noise Analysis.
	**Vijayakumar K Ph.D** (NIT, Trichy) **Research Interests:** Power Electronics, Instrumentation and Control, Embedded Controllers, Industrial Electronics, Renewable Energy Systems, Home Energy Management System, Smart Grid, Application of IoT in Energy System		**B.ChittiBabuPh.D** (NIT, Rourkela) **Research Interests:** Power Electronics applications in smart distribution grids containing renewable energy resources. Design of low power photovoltaic (PV) energy system for portable applications

Kumar Prasannajit Pradhan Ph.D
(NIT, Rourkela)
Research Interests:
Modeling & Simulation of Nanoscale Devices, SOI MOSFETs, FinFETs, Negative Capacitance FETs, Radiation Hardened Devices

Prerna Saxena Ph.D
(NIT, Nagpur)
Research Interests:
Antenna Design, Metamaterials, Smart Antennas, Antenna Array Pattern Synthesis, Soft Computing Techniques in Electromagnetics, Computational Electromagnetics

Pandiyarasan Veluswamy Ph.D
(National University Corporation Shizuoka University, Japan)
Research Interests:
Wearable Devices for self-powered (Thermoelectric, Solar, Nano generator), Materials for Electronics applications, Textile nanotechnology and smart fibers of energy harvesting Self-power generation for physiological sensors Nanoelectronics and Nanosensors

Research Scholars	Topic of Research
A Ananth	Error Analysis of Space Shift Keying Systems
Ajay Shankar	Development of and Energy Management System Using Low Voltage DC Nanogrid
Akhila K	Power Electronics Control of Electric Vehicle
Burra Venkata Srikanth	Signal and Image Processing
Chandrasekar L	Explorations of 2D Material Based Nono Electronics Devices to Support Ballistic Transport
CHANDU D S	Investigations and Implementations of Novel Methods in the Design of Circularly Polarized Printed Antennas
D.Tharani	RF and Microwave antennas
Dhayalakumar M	High Performance VLSI Architectures for High Efficiency Video Coding (HEVC)
Dinesh G	Switched Capacitor based Sigma Delta ADC Design
Dony J Muttath	Content Filtering in Social Networks
Gadamsetty. Muralidhar	Switched capacitor circuit Simulators development
K Sridharan	Grid-Integration of Energy Systems
Kirubakaran S	Wireless Communication
Manikandan S	Control System, Time delay electrical systems
Moupuri Satish Kumar Reddy	Solid state batteries
Mukkapati Ashok Bhupathi Kumar	Analysis and Development of High Voltage Gain Quadratic Boost Converter with Reduced Voltage Stress
Pallepogu Prasanna Kumar	Design of High Gain, Area Efficient Structures for Millimeterwave Applications
Parthipan C G	Design, Development and Control of Unmanned Aerial Vehicles with Multilink Manipulators

R. Adeline Mellita	Design, Analysis and Implementation of Printed Pe Microwave Applications
S.Sudharson	Biomedical Image Processing
Santhosh Kumar M	Resource Allocation in Cognitive Radio Networks
Shobana V.M	Mixed Signal IC Design
Simhadri Ravishankar	Communications
Skanthi Kappagantula	Approximate Computing Hardware Architectures f Video Processing
Srinivasulu Jogi	Analysis and Design of Discrete-Time State Delays
Surimarla Pratap	Image Processing, Machine Learning
Vanamadi Ravi	Acoustic Signal Enhancement in Hearing AIDS &
Vijay Prabhu J	Development of High Step up DC-DC Converter for Applications.
Xavier Arockiaraj S	Elimination of overflow oscillations in fixed poin disturbances

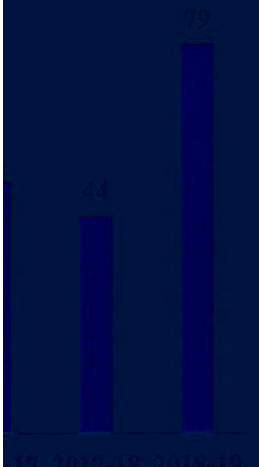
Practical Courses

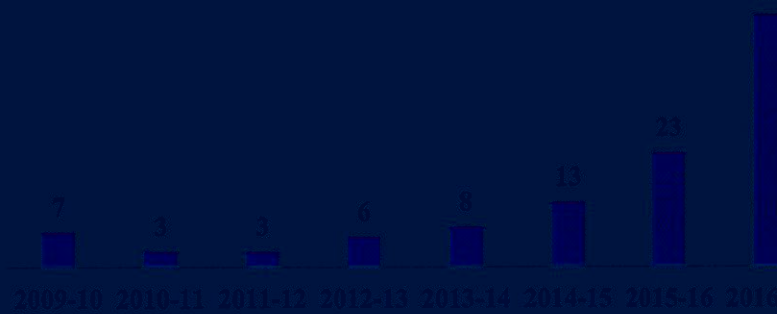
- Electrical Drives
- Analog Circuits
- Digital Signal Processing
- Sensor and Instrumentation
- Digital Logic Design
- Microproces
- Communica
- PCB Design
- VLSI Design
- Embedded S

Elective Courses

- Electromagnetic Interference and Compatibility
- Wireless Communication
- Data Communication Networks
- Design of SMPS
- VLSI Data C
- Advanced C Networks

Publications

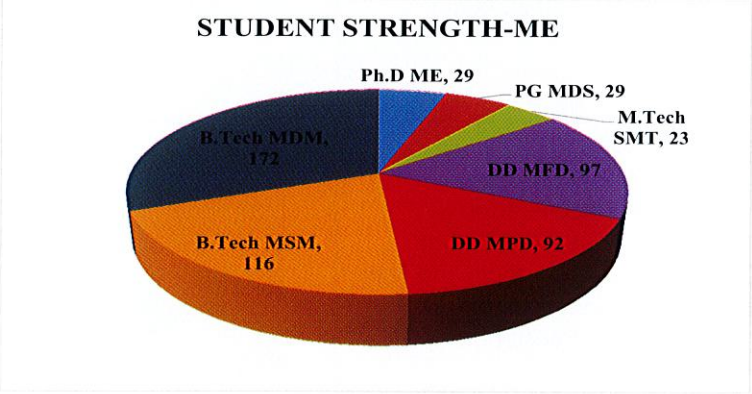


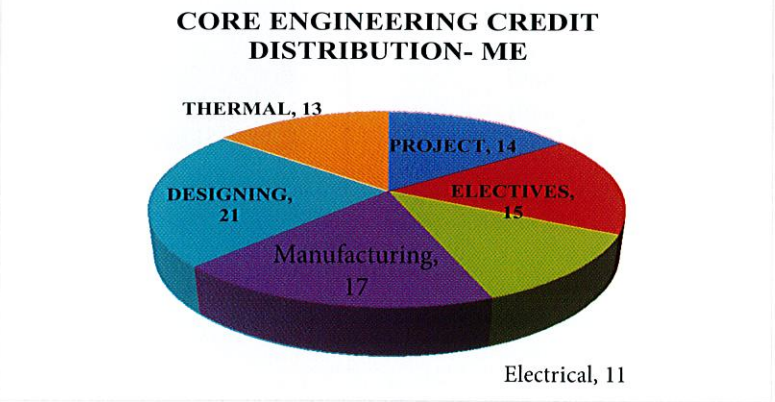


Mechanical Engineering

Equipped with well-structured instruction and learning resources and research facilities, the institute aims to disseminate education in the inter-disciplinary areas of mechanical design and manufacturing engineering. The UG, Dual Degree, PG, PhD programs offered by the Mechanical Engineering stream augment the existing Mechanical Engineering curricula offered by IITs with design courses on conceptualization, visualization and engineering simulations. Design visualization imparted through graphic art practice and product design practice enables students to conceptualize, design, simulate and develop tangible products.

B Tech (4 Years)	Mechanical Engineering Smart Manufacturing
Dual Degree (5 Years)	**B. Tech** Mechanical Engineering and M. Tech. in Mechanical Engineering with Specialization in Product Design **B. Tech** Mechanical Engineering and M. Tech. in Mechanical Engineering with Specialization in Advanced Manufacturing
M Tech (2 Years)	**M. Tech.** in Mechanical Engineering with Specialization in Mechanical Systems Design **M. Tech.** in Mechanical Engineering with Specialization in Smart anufacturing
Ph D	Mechanical Engineering





Faculty

	**Venkateshan S P** PhD (IISc) **Research Interests:** Space Heat Transfer, Inverse Methods in Heat Transfer, Cooling of Electronic Components, Instrumentation		**Narayanan, S,** PhD (IIT Kanpur) **Research Interests:** Vibrations and Acoustics, Dynamical Systems, Smart Structures.
	**Karthic Narayanan** PhD (NTU, Singapore) **Research Interests:** Manufacturing Process Mechanical behavior of nano materials Solar PV stress analysis		**Pandithevan P.** PhD (IIT Guwahati) **Research Interests:** Medical Image based Reconstruction, Bio-mimetic Design & Tissue Engineering.
	**Jayabal K.** PhD (IIT Madras) **Research Interests:** Computational Mechanics, Finite Element Methods, Material Modelling		**Raja B.** PhD (Anna University, **Chennai)** **Research Interests:** Nanofluids, Enhanced Heat Transfer, Electronic Cooling Systems
	**Jayavel S,** PhD (IIT Madras) **Research Interests:** Computational Fluid Dynamics, Fluid and Thermal Sciences, Heat Transfer		**Senthilkumaran K.** PhD (IIT Delhi) **Research Interests:** Additive Manufg, Sustainable & Smart Manufg, Design Manufg Integration,
	**Shahul Hamid Khan** PhD (NIT Trichy) **Research Interests:** Multi Objective Optimisation, Supply Chain Management, Metaheuristics		**Sudhir Varadarajan,** PhD (IIT Madras) **Research Interests:** Complex responsive processes in design and innovation, Product/service innovation, Conceptual design

	**Sreekumar M.** PhD (IIT Madras) **Research Interests:** Robotics & Automation Serial, Parallel & Compliant Mechanisms, Smart Materials Manufacturing & IOT		**Venkata Timmaraju Mallina** Ph.D (IIT Madras) **Research Interests:** Modeling of Materials Behavior, Fatigue and Fracture, Design with Polymers and Composites
	**Shubhankar Chakraborty** PhD (Indian Institute of Technology Kharagpur) **Research Interests:** Heat Transfer, Multiphase flow, Multisensor measurement and data fusion, image processing		**Siva Prasad AVS** PhD (IIT Kanpur) **Research Interests:** Damage Mechanics Dynamic Behaviour of Materials Meshless Methods
	**Gowthaman Swaminathan** PhD (North Carolina A&T State University **Research Interests:** Polymers and composites, Nano materials, High temperature foams, Experimental mechanics		**Raguraman Munusamy** Ph.D., (IISC Bangalore) **Research Interests:** Multi-scale modelling of lightweight materials - metals, composites, honeycomb and hybrid structures, Design of experimental facilities

Research Scholars	Topic of Research
Anandakumar P	Polymer Composites
Badri Narayanan K B	A Multi-Agent Approach with Swarm Intelligence in Smart Manufacturing
Balaji K	Singularity identification and avoidance in parallel mechanisms
Devara Venkata Krishna	Biomechanical Engineering
Dileep R Sekhar	Studies on ZnO Nano Wires Integrated Composite Materials
Gopi G	Additive Manufacturing
Gurunathan C	Surface modification for polymer material for improved tribo performance
Hemnath A K	Experimental analysis on the properties of the products made from metal deposition technique.
Jayakrishnan J	Additive Manufacturing
K C Charan	Smoothed Particle Hydrodynamics(SPH), Computational Mechanics.
Kartheesan S	Tribology
Madhanagopal M	Additive Manufacturing
Mathusuthanan M	Thermo-mechanical Investigation of Solar PV
Parthiban P	Fatigue behavior of multiscale thermoplastic composites
Pavan Kumar A	Design and Development of Collision Energy Absorption System
Penumuru Durga Prasad	Interdisciplinary Cyber-Physical Systems with Swarm Intelligence and IoT in Smart Manufacturing
Prasanna Venkadesan V	Total Hip Arthroplasty-Surgery
Raj Kumar G	Robot Assisted Digital Reconstruction

Rajasekar K	Heat and Mass Transfer
Ramarajan J	CFD, Heat Transfer
Reginal Elvis P	Additive Manufacturing
Satheeshkumar V	Multi-robot Path Planning in Constrained Environment
Sathish Kumar D	Heat Transfer, CFD
Sathish Kumar R	Micromechanical Modelling of Magnetostrictive Materials using Polygonal Finite Elements
Siddharth Ramachandran	Solar thermal applications
Srinivasagan M	Design and Development of Laser Cut Stent Patterns for Enhanced Performance and Life
Srinivasan G	An investigation of heat and mass transfer characteristics of spin freezing and drying process
Vinayaga Muruga Pandy N	Development Of A Computer-Assisted, Pre-Operative Surgical Methodology for Orthopaedic Applications
Vivek Kumar Chouhan	Supply Chain Management

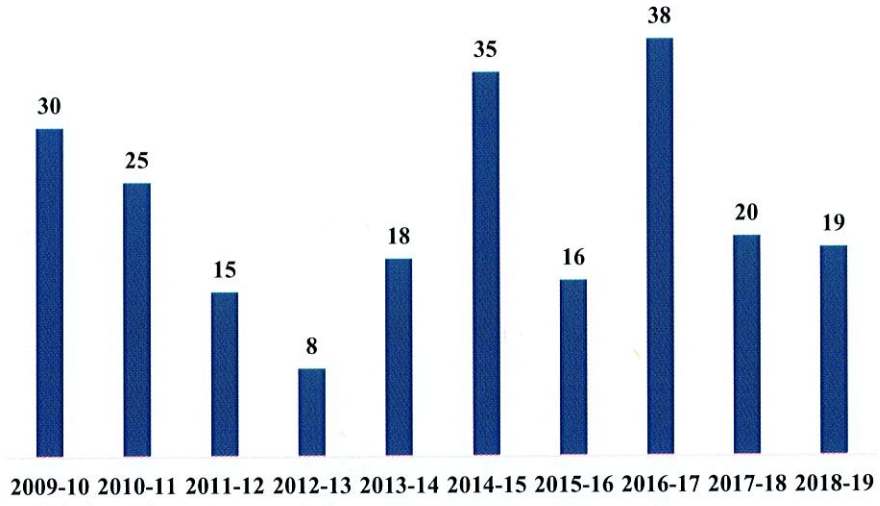
Core Courses

- Mechanical Design
- Quality Inspection and Product Validation
- Fluid Mechanics and Heat Transfer
- Thermal Engineering
- Sensors and Controls
- Manufacturing Automation
- Mechanical Design Simulation
- Product Design
- Product Realization
- Machine Drawing and Manufacturability Analysis

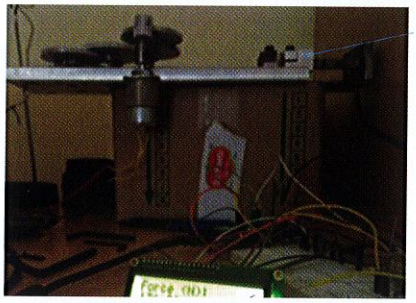
Elective Courses

- Advanced Geometric Modelling and CAD
- Design for Heat Exchanger
- Advanced Mechanics of Materials
- Design for Vibration Control
- CNC Technology and Programming
- Design Optimization
- Design for Electronic Cooling System and Packaging
- Smart Materials and Applications

Publications

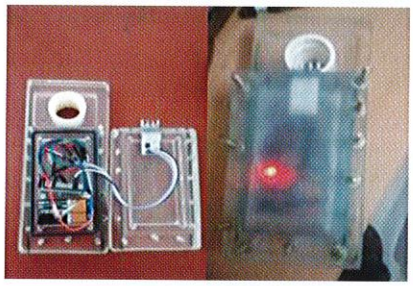


Some Ongoing Student Projects

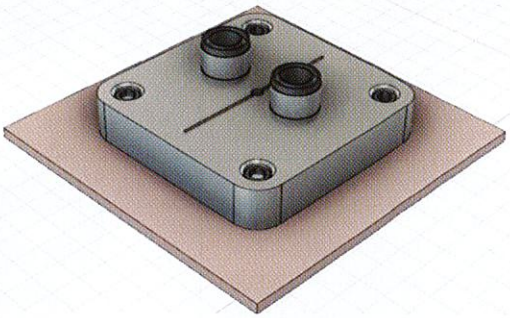


Low Cost Micro-Tensile Tester

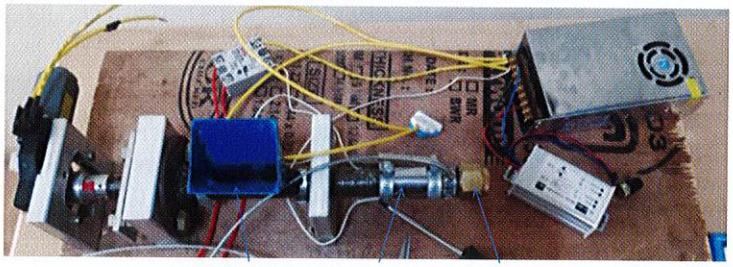
Multi port mini-channel freeze dryer shelf

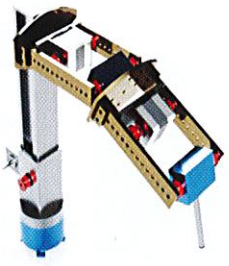


Low pressure vapor measurement

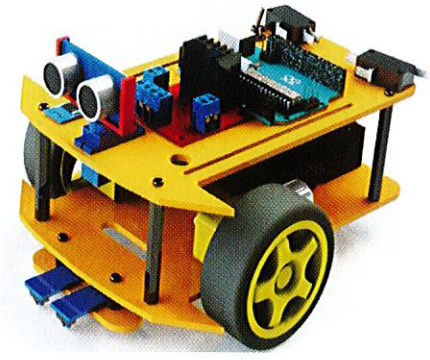


Endothermic cooler

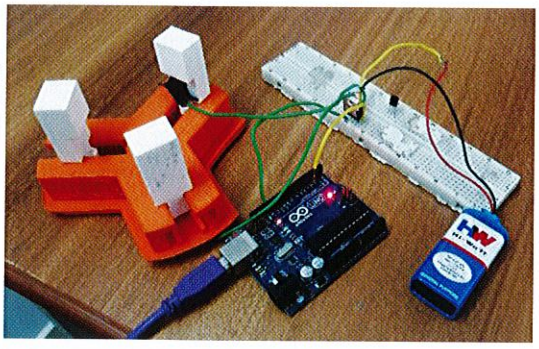




Extruder for Extruding Filaments for 3D Printing of Plastic PartsRobot Mechanisms



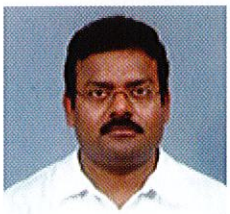
Mobile Robot



Grippers

Basic Sciences & Humanities

Faculty

	**Shalu M. A.** PhD (IIT Madras) **Research Interests:** Graph Theory, Algorithms, Metabolic Networks		**Naveen Kumar** PhD (IIT Delhi) **Research Interests:** Fiber Optics, Solar Thermal Energy Applications, Renewable Energy Applications
	**Vijayakumar S.** PhD (IIT Madras) **Research Interests:** Algorithms, Combinatorial Optimization, Computational Complexity		**Tapas Sil** PhD (VisvaBharati Univ) **Research Interests:** Giant Resonances of Nuclei, Relativistic Mean Field Theory in Nuclear Structure, Properties of Hot Nuclei
	**Nachiketa Mishra** PhD (IIT Madras) **Research Interests:** PDE, Numerical Analysis, Numerical Linear Algebra, Theory of Homogenization, Differential Algebraic Equations		**Nil Kamal Hazra** PhD (IISER Kolkata) **Research Interests:** Reliability Theory, Applied Probability
	**Anushree P Khandale** PhD (RTM Nagpur University) **Research Interests:** Materials for Electrochemical Device Applications (Solid Oxide Fuel cells, Alkaline Fuel Cells, Sensors etc.) Electrochemical Impedance Spectroscopy		**JayachandraBingi** PhD (IIT Madras) **Research Interests:** Photonics for Defence and medical applications (Photonic devices and sensors) Bio-inspired research and development
	**Vivek Kumar** PhD (IIT Delhi) **Research Interests:** Photovoltaics, Semiconductor Nanostructures, Raman & Photoluminescence Spectroscopy; Electron transfer properties of metalloproteins		**Y. Ashok Kumar Reddy** PhD (Sri Venkateswara University) **Research Interests:** Thin film coatings technology, Materials Science

Research Scholars	Topic of Research
Ashish Kumar	Optical Fiber Micro-Wire and Nano-Wire Based Sensors/Devices For Communication and Sensing Applications
Cyriac Antony	Graph Theory and Algorithms
Dhanalakshmi S	Subset Problems in Higher Chordality and 2K2-Free Graphs – Structural and Algorithmic View
Harisankar P C	Nuclear Equation of States and Symmetry Energy
Hemalatha V	Photonics Based Water Purification
Joyashree Mondal	Algorithms Design
Madhab Barman	Numerical Analysis to Differential Equation
N N Subhashree Ojha	Fiber Optic Interferometric Sensor
Pritam Pradeep Shetty	Phase Structured Coherent Light Beams for Sensing Applications
Sagar Zephania C F	Quantum Thermodynamics
Snigdhashree Nayak	Numerical Analysis to Partial Differential Equations
T. Anusuya	Investigation on Graphene Quantum Dots for Sensing and Energy Applications
Tanmay Sahoo	Thermo-mechanical Investigation of Solar PV

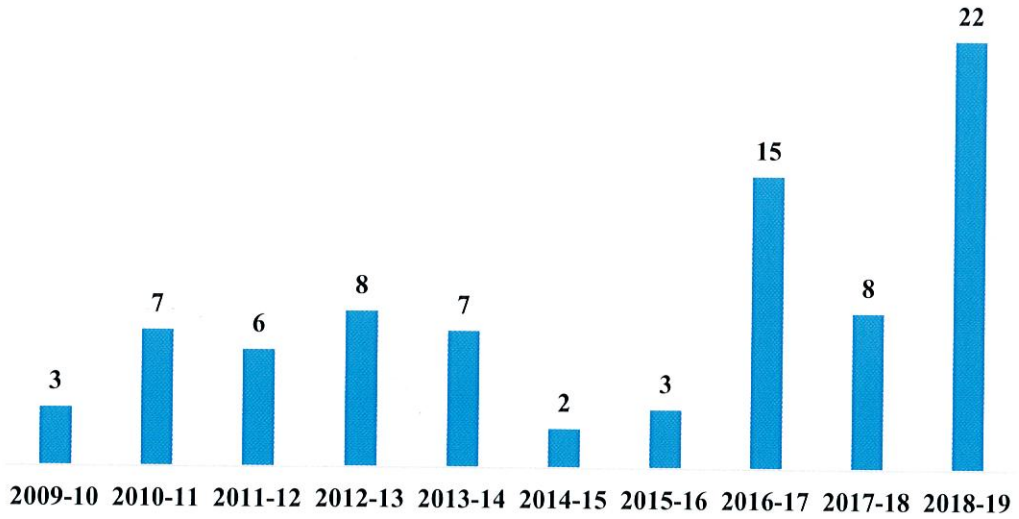
Core Courses

- Mechanics and Wave
- Electromagnetics & Quantum Mechanics
- Basic Materials and Mechanics
- Measurements and Data Analysis

Elective Courses

- Bio-Inspired Design

Publications



Some Ongoing Student Projects

Fully functional Five wheel Stair climber PROTOTYPE

CAD Model and Prototype of Automatic Sandwich Maker

04

6th Convocation

Sixth Convocation was held on 22.07.2018 in the Institute campus. Distinguished Chief Guest, Dr Pramod Kumar Mishra, Additional Principal Secretary to Prime Minister of India graced the occasion and delivered the Convocation Address. Prof M S Ananth, Chairman, Board of Governors and former Director IIT Madras presided over the ceremony. In the convocation ceremony, the Director of the Institute, Prof. Banshidhar Majhi awarded degrees to 116 UG, 29 PG and 4 Ph D students, totaling 149 graduates. The accolades to the winners of various categories were awarded by the Chief Guest.

SUMMARY OF GRADAUNDS

Sl. No	Degree	Discipline	No. of Students
1	B. Tech	COE	45
2		EDM	37
3		MDM	34
4	M. Des	CDS	11
5		EDS	9
6		MDS	9
7	Ph. D	CE	1
8		EE / EC	2
9		ME	1
	Total		**149**

MEDALS AND PRIZES

Institute Merit Prize

Degree	Roll No	Name	CGPA
B Tech	COE14B042	VIGNESH SAIRAJ	9.75
M Des	MDS16M003	JEGANATHAN K J	9.82

Best Outgoing Student (B Tech)

Roll No	Roll No
EDM14B014	G ESWAR SAI KRISHNA

Best Project Awards

Degree	Branch	Roll No	Name
B Tech	COE	COE14B042	VIGNESH SAIRAJ
	EDM	EDM14B024	KRISHNA KUMARAN R
	MDM	MDM14B009	GOLLA BRAHMAM

Degree	Branch	Roll No	Name
M Des	CDS	CDS16M004	KRISHNA ANILKUMAR
	EDS	EDS16M011	SHANMATHI R
	MDS	MDS16M009	YELAMARTHI SAI KRISHNA

Students-Honours with Distinction

Sl No	Roll No	Student Name	CGPA	Total credits earned including Honours
1.	COE14B006	CHEDHELLA VENKATA PRAVEENA	9.3	179
2.	COE14B039	VAMSHI GANGADHAR CHILUKA	9.21	177
3.	COE14B042	VIGNESH SAIRAJ	9.75	178
4.	EDM14B003	APARNAA R	9.24	179
5.	EDM14B024	KRISHNA KUMARAN R	9.65	179

Students with Distinction

Sl. No	Name of the Student	Roll No	CGPA(≥9.0)
1.	M BALASUNDAR	MDM14B017	9.52
2.	SETTY ABHISHEK	MDM14B029	9.2
3.	M AISHWARYA	COE14B020	9.19
4.	B AMULYA SAI	EDM14B005	9.01
5.	JEGANATHAN K J	MDS16M003	9.82
6.	MUNEESHWARAN M	MDS16M001	9.76
7.	KRISHNA ANILKUMAR	CDS16M004	9.75
8.	MD SEHZAD ALLI	MDS16M007	9.28
9.	SHANMATHI R	EDS16M011	9.14

05

Institute Library

The library is fully equipped with excellent collection of books, periodicals (Print magazine & Journals), e-books, e-journals, CD ROMs, leading national newspapers and NPTEL course video contents are committed to support the institute's mission. Our Library is one among the few in the world to have Kindle, an electronic book reader which contains a plenty of classical literature and technical books for the use of students. Also, Library having the subscription of Anti-plagiarism software (Turnitin) which helps students to learns how to avoid plagiarism and improve their academic writing. The Library is using an automated Library and Information Management software KOHA. All the registered users (Students, Faculty members, Staff) can access the institute Library from anywhere within the campus through LAN/Wi-Fi and also through their personal network.

The Library maintains a separate collection of reference books. The Library follows the Machine-Readable Catalogue (MARC 21) standard for cataloguing and Universal Decimal Classification (UDC) scheme for classification of library documents.

Resources	Total Numbers	Newly Added (Apr' 18 – Mar' 19)
Books (Text & References)	5529	287
Journals/Magazines (print)	36	01
News Papers	04	-
CD-ROM/DVDs	713	-
Theses and Dissertation	517	-
E-Books	22	-
E-Journals (IEEE, ACM, ASME etc.)	3122	-
Gratis	447	122

Online Resources through e-ShodhSindhu consortium

Access to e-Journals/Databases available for this year also through e-ShodhSindhu consortium. It is un-limited users with unlimited download access. The total numbers of e-Journals are 2904. The details of the resources available through eSS are listed below.

Resources	Total Number of Journals
ACM Digital Library	1153
ASME Journals Online	29
Springer Link + Nature Journal	1722
Institute for Studies in Industrial Development (ISID) Database	-

Online Resources through IIITDM Library

IIITDM library subscribed IEEE IEL Online package with unlimited users' access apart from the resources available through e-ShodhSindhu consortium. It contains 218 Journals & Magazines, 1725 conference titles and more than 3900 approved and published IEEE standards. Also we have a collection of prescribed text e-books published by Pearson.

Motivational Books

The institute also have motivational books for the benefit of Students

Online Public Access Catalogue (OPAC)

Previously library web portal (OPAC) can be accessible within the institute through LAN or Wi-Fi only (http://172.16.1.200/). Now it is linked with institute's public IP (http://14.139.187.101/) and can be accessible through anywhere at any time. This enable students to search library catalog to locate necessary information, resources, books and other materials available at library. It is also used for renewal and reservation of books also from anywhere.

Book Fair 2018

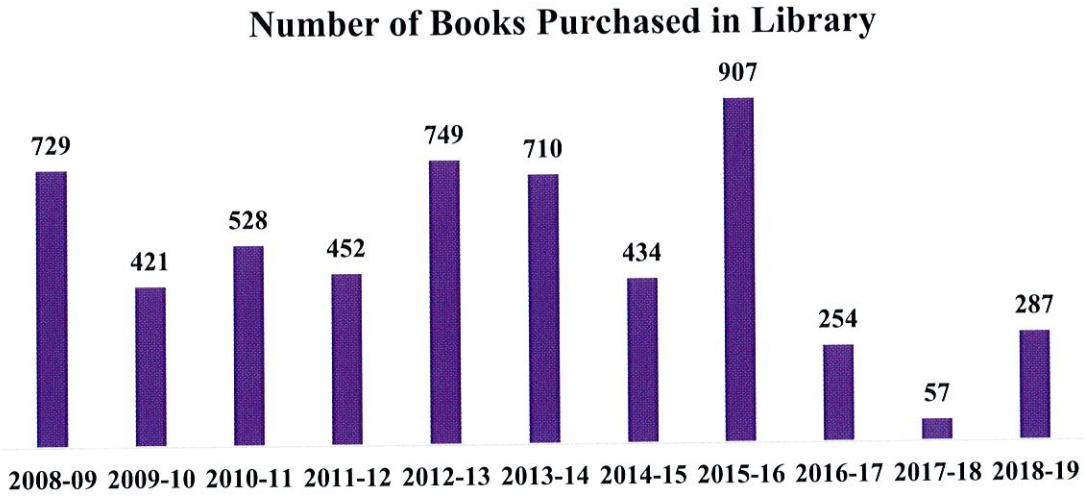
In order to encourage students to purchase text and other books for their personal and professional development, a Book Fair was organized during 6-7th of August, 2018.

Extended Working Hours

The working hour of the library is 09.00 AM to 10.00 PM in weekdays and 09.00 AM to 05.30 PM in Saturdays. Also, library will function on Sundays during examination.

Digital Library

The Institution have initially set up with two computer systems to access digital collection of the library for student's community. This can be used for accessing subscribed e-journals, e-books, NPTEL video lectures and library intranet etc.



06

Research and Innovation

"Never stop fighting until you arrive at your destined place - that is, the unique you. Have an aim in life, continuously acquire knowledge, work hard, and have perseverance to realise the great life."

--Dr A. P. J. Abdul Kalam

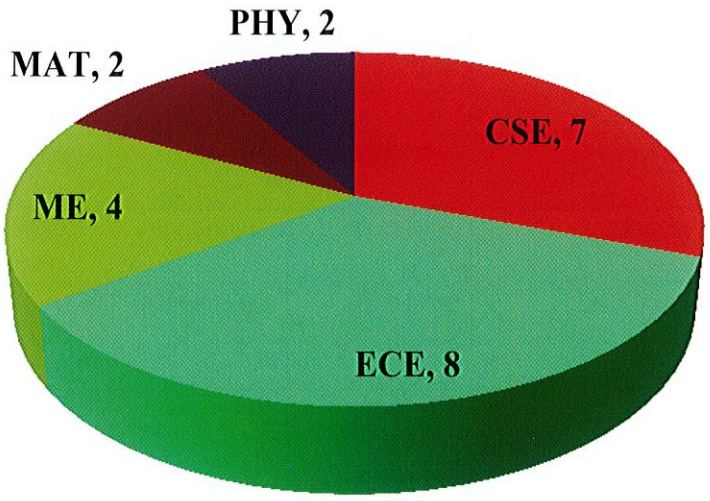
PhD Scholars @ IIITDM Kancheepuram

PhD Scholars who have defended their thesis till March 2019

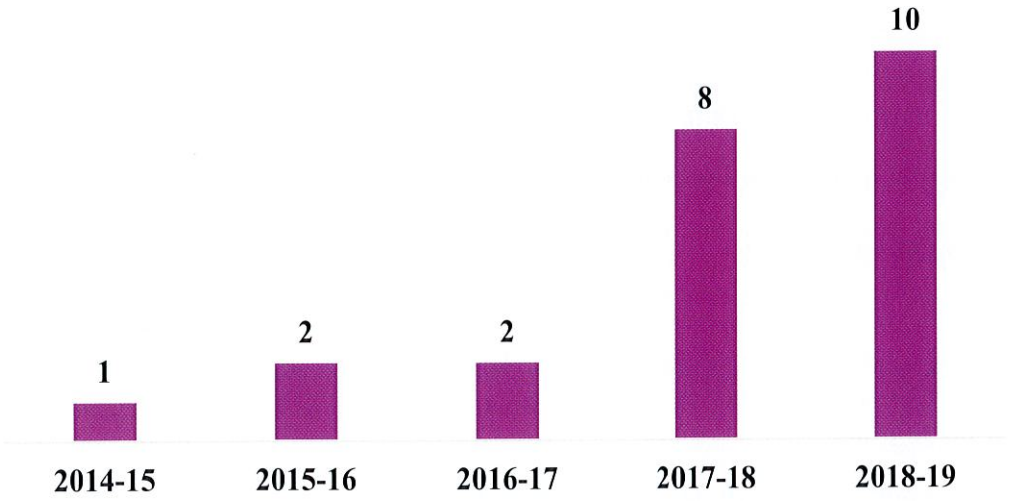
Sl. No.	Roll No.	Scholar	Date of Defense	Supervisor	Title of the Thesis
1.	EDM09D001	Madhevan B.	06/02/2015	Sreekumar M.	Implementation of Role Assignment in Multi Robots using Leader Follower Approach
2.	PHY10D001	Ramachandran K.	23/12/2015	Naveen Kumar	Special Tailoring through Concatenated All-Fiber Interferometers for Communication and Sensing Applications
3.	EDM10D002	Rajin M. Linus	20/01/2016	Damodharan P.	Study of Maximum Power Point Tracking Algorithms for Permanent Magnet Synchronous Generator based Wind Energy Conversion System
4.	MAT10D001	Devi Yamini S.	23/06/2016	Shalu M. A.	The Maximum Independent Set Problem and its Counting Variant
5.	COE12D001	Mohamed Asan Basiri M.	08/07/2016	Noor Mahammad S.	High Performance VLSI Architectures for Discrete Transformations
6.	EDM12D001	Abdul Majeed K. K.	08/05/2017	Binsu J. Kailath	Composite PFD based Low Power Low Noise Fast Locking PLL with Dynamic Loop Bandwidth
7.	EDM13D001	Phani Kumar K. V.	13/07/2017	Karthikeyan S. S.	Design, Analysis, and Implementation of RF/Microwave Planar Passive Deives for Wireless Applications
8.	MDM12D001	Senthil Kumar R.	13/07/2017	Jayavel S.	Numerical and Experimental Study of Heat Transfer Enhancement in Electronic Systems
9.	MAT11D001	Sandhya T. P.	27/07/2017	Shalu M. A., Vijayakumar S.	Graph Coloring and its Variants
10.	COE10D001	Kanjar De	01/08/2017	Masilamani V.	Algorithms for assessing Image Quality without Reference
11.	EDM09D002	Papanasam E.	04/08/2017	Binsu J. Kailath	High-k/SiC MIS Capacitors-Fabrication, Characterization and Extraction of Gate Leakage Current Mechanisms
12.	MDM09D001	Usha S.	16/08/2017	Sreekumar M.	Investigations on the Effects of Surface Topography in the Actuation Performance of Stacked and Rolled Deap Actuator
13.	EDM10D001	Arun K.	27/11/2017	Selvajyothi K.	Variable Sampling Period Based Frequency Locked Loops for Single Phase Grid Synchronization

14.	MDM13D002	DEEPAKKUMAR R	05/04/2018	Jayavel S.	Computational Study of Vortex Shedding Control for Flow Past Circular Cylinder
15.	EDM13D002	MAHESWARAN P	05/07/2018	M. D. Selvaraj	Investigations on The Performance of Spatial Modulation Systems
16.	COE13D002	Ayesha S K	16/07/2018	V. Masilamani	Robust Multiplicative Watermarking Schemes for Digital Image Security
17.	COE14D001	MANIKANDAN V M	27/07/2018	V. Masilamani	Data Hiding Methods for Digital Image Security
18.	COE14D002	RENJITH P	03/08/2018	Sadagopan N	On Spanning Trees - Constraints, Variants and Generalizations (Theory, Algorithm and Dichotomy)
19.	MDM13D001	S SANTHOSH	09/10/2018	Shahul Hameed Khan	Design and Optimization of Closed Loop Supply Chain
20.	EDM15D003	RUSAN KUMAR BARIK	17/10/2018	S. .S Karthikeyan	Design and Implementation of Wideband and Multi-Band RF/ Microwave Components
21.	COE13D003	OSWALD C	14/11/2018	B.Sivaselvan	Efficient Algorithms for Text and Image Compression Based on Knowledge Engineering
22.	PHY12D001	MANIMEGALAI K	25/03/2019	Tapas Sil	Dynamics of the anharmonic oscillators
23.	COE13D004	SHANMUGAKUMAR. M	29/03/2019	Noor Mahammad Sk	On the Development of Novel High Performance Packet Classification Architectures

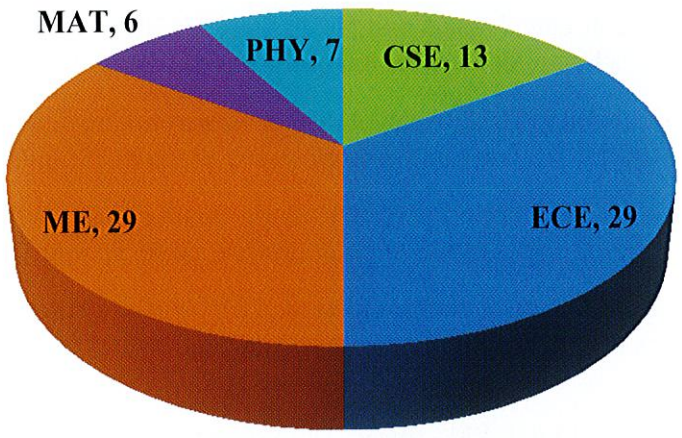
Ph.D Scholars - Thesis Defended (31.03.2019)



Ph.D Scholars Passed Out



Ongoing Ph.D Department wise



Patents and Publications, 2018-19

Patents (Till Date):

1. Pankaj K. Sa, Ansuman Mohapatra, Banshidhar Majhi, "Systems and Methods for generating Synopsis of Multi-View Videos", Application No. 201731028957, 16-Aug-2017.
2. Banshidhar Majhi, Umarani Jayaraman, Avinash Ranganathan, Edwin Murari, Text Free Interface for Managing Contacts on Smart Mobile Phone, Application No. 2018 4100 4534, 07-Feb-2018.
3. Shahul Hamid Khan, IOT Enabled Hydraulic Controlled Multi-Directional Lifting & Dropping Dumper, Application No. 201841028867, 1 Aug. 2018.
4. M Sreekumar and Others, Robot Race Track, Application No.: 314718-001 Dtd.6 Feb 2019

International Journals:

CSE

1. Christy, D.S., Masilamani, V., Thomas, D.G., Nagar, A.K. and Robinson, T., 2018. "Accepting H-Array Splicing Systems and Their Properties". Romanian Journal of Information Science and Technology, 21(3), pp.298-309.
2. Renjith, P. and Sadagopan, N., 2018. "The Steiner tree in K1, r-free split graphs—A Dichotomy". Discrete Applied Mathematics.
3. Oswald, C. and Sivaselvan, B., 2018. "Text and Image Compression based on Data Mining Perspective". Data Science Journal, 17.
4. Dhanalakshmi, S. and Sadagopan, N., 2018. "On strictly chordality-k graphs". Discrete Applied Mathematics.
5. De, K. and Masilamani, V., 2018. "No-reference image quality measure for images with multiple distortions using random forests for multi method fusion". Image Analysis & Stereology, 37(2), pp.105-117.
6. Manikandan, V.M. and Masilamani, V., 2018. "Histogram shifting-based blind watermarking scheme for copyright protection in 5G". Computers & Electrical Engineering, 72, pp.614-630.
7. Manikandan, V.M. Nelapati Lava Prasad. and Masilamani, V., 2018. "Half difference expansion based reversible data hiding scheme for medical image forensics," Current Medical Imaging.
8. Sk, Ayesha. and Masilamani, V., 2018. "A novel digital watermarking scheme for data authentication and copyright protection in 5G networks". Computers & Electrical Engineering, 72, pp.589-605.
9. De, K. and Masilamani, V., 2018. "A No-Reference Image Quality Measure for Blurred and Compressed Images Using Sparsity Features". Cognitive Computation, 10(6), pp.980-990.
10. Isunuri Bala Venkateswarlu. and Jagadeesh Kakarla., 2019 "Password security by encryption using an extended ADFGVX cipher." International Journal of Information and Computer Security ,Inderscience, (SCOPUS) (Accepted).
11. Singh, M., Bhoi, S.K. and Khilar, P.M., 2019. "Omnidirectional Radio Propagation Antenna Using Organized Grouping of Monopole Antennas". National Academy Science Letters, 42(2), pp.109-113.
12. Bhoi, S. K., Sahu, P. K., Singh, M., Khilar, P. M., Sahoo, R. R. and Swain, R. R., 2019. "Local Traffic Aware Unicast Routing Scheme for Connected Car System," in IEEE Transactions on Intelligent Transportation Systems.

13. Jyoti, B., Surender Soni. and Jagadeesh Kakarla., 2019. "A Scalable and Energy Efficient MAC protocol for Sensor \& Actor Networks" International Journal of Communication Systems, Wiley, impact factor 1.106, (SCI), (Accepted).

14. Mohamed Asan Basiri, M. and Noor Mahammad, Sk.,2019 "Discrete orthogonal multi-transform on chip (DOMoC)". Journal of Signal Processing Systems, 91(5), pp.437-457.

ECE

1. Sravan, M.S., Natarajan, S., Krishna, E.S. and Kailath, B.J., 2018. "Fast and accurate on-road vehicle detection based on color intensity segregation". Procedia computer science, 133, pp.594-603.

2. E Esakki, Papanasam. and Kailath, B.J., 2018." Effect of post deposition annealing and post metallization annealing on electrical and structural characteristics of Pd/Al2O3/6H-SiC MIS capacitors", Microelectronics International, 35(2), pp. 65-73.

3. Abdul Majeed, K.K. and Kailath, B.J., 2018. "Novel PLL architecture with a composite PFD and variable loop filter" IET Circuits, Devices and Systems, 12(3), pp. 256 – 262.

4. Maheswaran, P. and Selvaraj, M.D., 2018. "Dynamic SSK-BPSK System Under Transmitter Correlated Nonidentical Rayleigh Fading". IEEE Systems Journal, (99), pp.1-8.

5. Ananth, A. and Selvaraj, M.D., 2018." Error analysis of SSK with Euclidean distance based selection combining". IEEE Transactions on Vehicular Technology, 67(4), pp.3195-3204.

6. Kokil, P., Parthipan, C.G., Jogi, S. and Kar, H., 2018. "Criterion for realizing state-delayed digital filters subjected to external interference employing saturation arithmetic". Cluster Computing, pp.1-8.

7. Kokil, P., Jogi, S. and Ahn, C.K., 2018. "Stability analysis of digital filters subjected to interference using generalized overflow nonlinearities". Signal Processing, 148, pp.1-8.

8. Kokil, P., Arockiaraj, S.X., Jogi, S. and Kar, H., 2018. "New realizability criterion for digital filters with external disturbance and saturation arithmetic". AEU-International Journal of Electronics and Communications, 85, pp.179-182.

9. Pradhan, K.P., Saha, S.K., Artola, L. and Sahu, P.K., 2018. "3-D TCAD Assessment of Fin-Based Hybrid Devices Under Heavy Ion Irradiation in 20-nm Technology". IEEE Transactions on Device and Materials Reliability, 18(3), pp.474-480.

10. Kumar, S., Chinnamuthan, P. and Vijayakumar, K., 2018. "Study on Renewable Distributed Generation, Power Controller and Islanding Management in Hybrid Microgrid System". Journal of Green Engineering, 8(1), pp.37-70.

11. Padhi, T., Chandra, M., Kar, A. and Swamy, M.N.S., 2018. "A new hybrid active noise control system with convex combination of time and frequency domain filtered-x lms algorithms". Circuits, Systems, and Signal Processing, 37(8), pp.3275-3294.

12. Padhi, T., Chandra, M., Kar, A., 2018. "Performance evaluation of hybrid active noise control systems with online secondary path modeling," Applied Acoustics, Elsevier, 133, pp.215-236.

13. Anand, A., Kar, A. and Swamy, M.N.S., 2018. "An improved CLMS algorithm for feedback cancellation in hearing aids". Applied Acoustics, 129, pp.417-426.

14. Giri, A.K., Qureshi, A., Arya, S.R., Maurya, R. and Babu, B.C., 2018. "Features of Power Quality in Single-Phase Distributed Power Generation Using Adaptive Nature Vectorial Filter". IEEE Transactions on Power Electronics, 33(11), pp.9482-9495.

15. Sanjay K. Patel., Sabha Raj Arya., Rakesh Maurya. and Chitti Babu, B., 2018 "A new control scheme for DSTATCOM based on frequency adaptive disturbance observer," IEEE Journal of Emerging and Selected Topics in Power Electronics, 6(3), pp.1345-1354.

16. Giri, A.K.K., Arya, S.R., Maurya, R. and Babu, B.C., 2018. "Power quality improvement in stand-alone SEIG-based distributed generation system using lorentzian norm adaptive filter". IEEE Transactions on Industry Applications, 54(5), pp.5256-5266.

17. Yin, O.W. and Babu, B.C., 2018. "Simple and easy approach for mathematical analysis of photovoltaic (PV) module under normal and partial shading conditions". Optik, 169, pp.48-61.

18. Vimala Rani, C., Kamaraj, N. and Chitti Babu, B., 2018. "Improved method of maximum power point tracking of photovoltaic (PV) array using hybrid intelligent controller," OPTIK, Elsevier, vol.168, pp.403-415.

19. Roy, P.R., Parthiban, P. and Babu, B.C., 2018. "Implementation of Single-Phase Two-Switch Midpoint Unidirectional Multilevel Converter System". International Journal of Emerging Electric Power Systems, 19(4).

20. Ananthapadmanabha, B.R., Maurya, R., Arya, S.R. and Babu, B.C., 2018. "Smart Battery Charging Station for ElectricVehicle Using Half Bridge Power Converter". International Journal of Emerging Electric Power Systems, 19(4).

21. Salkuti, S.R., Sandeep, V., Babu, B.C. and Jung, C.M., 2018. "Multi-Objective based Optimal Generation Scheduling Considering Wind and Solar Energy Systems". International Journal of Emerging Electric Power Systems, 19(5).

22. Reddy, K.J., Sudhakar, N., Saravanan, S. and Babu, B.C., 2018. "High Step-Up Boost Converter with Neural Network Based MPPT Controller for a PEMFC Power Source Used in Vehicular Applications". International Journal of Emerging Electric Power Systems, 19(5).

23. Barisal, A.K., Mishra, S. and Babu, B.C., 2018. "Invasive weed optimization-based automatic generation control for multi-area power systems," Inter. Journal of Modelling & Simulation, Taylor & Francis, 38(4), pp.01-20, Dec 2018.

24. Karuppanan, P., Vipin Das. and Babu, B.C., 2018. "Modelling, simulation and analysis of high step up DC-DC converter using coupled inductor and voltage multiplier cell using PSCAD," Inter. Journal of Modelling & Simulation, Taylor & Francis, 38(4), pp.01-25.

25. Prabhin, V.S., Jeyasubramanian, K., Rashmi, I.J., Hikku, G.S., Veluswamy, P. and Cho, B.J., 2018. "Investigation of electrochemical capacitance of 18k nanoporous current collector incorporated MnO2". Materials Chemistry and Physics, 220, pp.128-136.

26. Ikeda, H., Khan, F., Veluswamy, P., Sakamoto, S., Navaneethan, M., Shimomura, M., Murakami, K. and Hayakawa, Y., 2018, July. "Thermoelectric characteristics of nanocrystalline ZnO grown on fabrics for wearable power generator". In Journal of Physics: Conference Series (Vol. 1052, No. 1, p. 012017). IOP Publishing.

27. Hikku, G.S., Jeyasubramanian, K., Jacobjose, J., Thiruramanathan, P., Veluswamy, P. and Ikeda, H., 2018. "Alkyd resin based hydrophilic self-cleaning surface with self-refreshing behaviour as single step durable coating". Journal of colloid and interface science, 531, pp.628-641.

28. Veluswamy, P., Sathiyamoorthy, S., Santhoshkumar, P., Karunakaran, G., Lee, C.W., Kuznetsov, D., Kadarkaraithangam, J. and Ikeda, H., 2018. "Sono-synthesis approach of reduced graphene oxide for ammonia vapour detection at room temperature". Ultrasonics sonochemistry, 48, pp.555-566.

29. Saravanan, L., Prabhu, D., Pandiyarasan, V., Ikeda, H. and Therese, H.A., 2018. "Impact of MgO thickness on the perpendicular magnetic anisotropy of Mo/Co2FeAl/MgO/Mo multilayers with improved annealing stability". Materials Research Bulletin, 107, pp.118-124.

30. Georgeena Mathew Parama Dey., Rituparna Das., Sreemayee Dutta Chowdhury., Merina Paul Das., Pandiyarasan Veluswamy., Bernaurdshaw Neppolian. and Jayabrata Das., 2018. "Direct Electrochemical reduction of hematite decorated graphene oxide (a-Fe2O3@erGO) nanocomposite for selective detection of Parkinson's disease biomarker," Journal of Biosensors & Bioelectronics, 115, pp.53 – 60.

31. Sandeep Kumar Lakhera., Hafeez Yusuf Hafeez., Pandiyarasan Veluswamy., Ganesh, V., Anish Khan., Hiroya Ikeda. and Bernaurdshaw Neppolian., 2018. "Enhanced photocatalytic degradation and Hydrogen production activity of In Situ grown TiO2 coupled NiTiO3 nanocomposites," Journal of Applied Surface Science, 449 , pp.790 – 798.

32. Khan, F., Pandiyarasan, V., Sakamoto, S., Navaneethan, M., Shimomura, M., Murakami, K., Hayakawa, Y. and Ikeda, H., 2018. "Seebeck Coefficient of Flexible Carbon Fabric for Wearable Thermoelectric Device". IEICE Transactions on Electronics, 101(5), pp.343-346.

33. Sathiyamoorthy, S., Girijakumari, G., Kannan, P., Venugopal, K., Shanmugam, S.T., Veluswamy, P., De Wael, K. and Ikeda, H., 2018. "Tailoring the functional properties of polyurethane foam with dispersions of carbon nanofiber for power generator applications". Applied Surface Science, 449, pp.507-513.

34. Saravanan, L., Raja, M.M., Prabhu, D., Pandiyarasan, V., Ikeda, H. and Therese, H.A., 2018. "Perpendicular magnetic anisotropy in Mo/Co2FeAl0. 5Si0. 5/MgO/Mo multilayers with optimal Mo buffer layer thickness". Journal of Magnetism and Magnetic Materials, 454, pp.267-273.

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36. Kailath, B. J. and Abdul Majeed, K. K., 2019. "Composite PFD based low power low noise fast lock-in PLL," in VLSI and Post-CMOS Devices, Circuits and Modelling, IET, (under print).

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3. Prasannavenkadesan, V. and Pandithevan, P., 2019. "Effect of sequential drilling process on in-situ bone temperature," in International Conference on Computational Methods in Manufacturing, Springer. (Accepted).

Conference Publications (International/National):

CSE

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2. Vikram Rao. and Munesh Singh., 2018, December. "Low-cost computer vision based real-time 3D localization of object for robotic applications," presented at 15th Edition of the IEEE India Council International Conference, IEEE Indicon, Dec. 2018, Coimbatore, India.
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10. Santhosh Kumar, S., Sreehari Veeramachaneni, R. and Noor Mahammad, Sk., 2019, March "An efficient DFT implementation using modified group distributed arithmetic," in proceedings of the 2019 6th IEEE International Conference on Signal Processing and Integrated Networks, SPIN 2019, Noida, India.

11. Kaushik, S., Vijayaraghavan, S. and Sivaselvan, B., 2019. "A survey of deep learning methods for miotic cell detection towards breast cancer diagnosis," Springer CCIS, ICACDS 2019.

12. Isunuri Bala Venkateswarlu. and Jagadeesh Kakarla., 2019. "Brain Tumor Extraction using Adaptive Threshold Selection Network" 1st IEEE International Conference on Energy, Systems and Information Processing, (Accepted).

13. Ramesh Babu Battula., Jagadeesh Kakarla. and Kalpana Naidu., 2019. "Spectrum aware pportunistic routing in multi-interface multi-channel CRWMN", 1st IEEE International Conference on Energy, Systems and Information Processing, (Accepted).

ECE

1. Sathyakumar, N., Balaji, K.P., Ganapathi, R. and Pandian, S.R., 2018. "A Build-Your-Own Three Axis CNC PCB Milling Machine". Materials Today: Proceedings, 5(11), pp.24404-24413.

2. Muttath, D.J., Santhoshkumar, M. and Premkumar, K., 2018, December. "Energy Optimal Packet Scheduling with Individual Packet Delay Constraints". In 2018 IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS) (pp. 1-6). IEEE.

3. Santhoshkumar, M., Muttath, D.J. and Premkumar, K., 2018, December. "Joint Distributed Sensing and Channel Access in Cognitive Radio Networks". In 2018 IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS) (pp. 1-6). IEEE.

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5. Arun, G., Routray, S R. and Pradhan, K P., 2018, December. "Effect of polarization induced 2DEG on carrier dynamics of GaN/In_{x}Ga_{1-x}N based planar solar cells," in IEEE International Conference on Emerging Electronics (ICEE), Bengaluru.

6. Saxena, P., Kothari, A. and Saxena, S., 2018, December. "Synthesis of antenna array pattern using ant Lion optimization algorithm for wide null placement and low dynamic range ratio," in International Conference on Intelligent Computing Techniques for Smart Energy Systems, Jaipur. Proceedings to be published in Lecture Notes in Electrical Engineering, Springer.

7. Kumari, G., Barik, R.K., Saxena, P. and Karthikeyan, S.S., 2018, November. "Compact substrate integrated waveguide power divider with slot-loaded ground plane for dual-band applications," in 2018 IEEE MTT-S International Microwave and RF Conference, Kolkata.

8. Pandian, S.R., 2018, December. "Playful STEAM Learning Using Robots". In 2018 IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE)(pp. 279-285). IEEE.

9. Pratap, T. and Kokil, P., 2019. "Automatic cataract detection in fundus retinal images using singular value decomposition," in 4th IEEE International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET), Chennai.

10. Sudharson, S. and Kokil, P., 2019. "Abnormality detection in the renal ultrasound images using ensemble MSVM model," in 4th IEEE International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET), Chennai.

11. Laxmi, N., Routray, S R . and Pradhan, K P., 2019, April. "InGaN/Si Hetero-junction tandem solar cell with self tunneling effect: proposal & analysis," in IEEE EuroSOI-ULIS, Grenoble, France.

12. Ammina Vishnu Priya., Vankudothu Shiva Prasad. And Pradhan, K P., 2019. "Optimization Of Ge Pocket Jlfet : AN APPROACH TO EXTEND THE SCALABLE LIMIT," in IEEE International Conference on Energy, Systems and Information Processing, Chennai.

13. Arun, G., Routray, S R., Pradhan, K P., 2019, January. "Effect of AlGaN layer in GaN/InGaN/GaN superlattice solar cell," in ICONN, Chennai.

14. Patel, P., Kumari, G. and Saxena, P., 2019, April. "Array Pattern Correction in Presence of Antenna Failures using Metaheuristic Optimization Algorithms". In 2019 International Conference on Communication and Signal Processing (ICCSP) (pp. 0695-0700). IEEE.

15. Pandiyarasan Veluswamy., Saravanan Subramanian., Muhmood ul Hassan., Cafer, T., Yavuz., Ho Jin Ryu. and Byung Jin Cho., 2019, January. "Improved thermoelectric properties of TiS2 fabricated by hot pressing," in International Conference on Advancements in polymeric materials, CIPET.

16. Pandiyarasan Veluswamy., 2019, January. "3D nanoporous ZnO structure on carbon fabric and its effect on the thermoelectric properties," in International Conference on Nano science and Nanotechnology, SRM University.

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1. Varun Gupta., Ramarajan, J. and S. Jayavel., 2018, December. "Design of rotor for savonius type vertical axis wind turbine," in International Conference on Small Wind Turbine, National Institute of Wind Energy (NIWE), Chennai.

2. Arshdeep Singh., Siga Satya Sekhar., Jayavel, S. and Sudhir Varadarajan., 2019, May. "Numerical study on the effect of impeller geometry on pump performance," in Proceedings of the International Conference on Applied Mechanical Engineering Research (ICAMER2019), NIT Warangal, India.

3. Ramarajan, J. and Jayavel, S., 2018, December. "Study on performance of savonius type vertical axis wind turbine," in Proceedings of 45rd National and 7th International Conference on Fluid Mechanics and Fluid Power, IIT Bombay, Mumbai.

4. Pandithevan, P., Prasannavenkadesan, V. and Vinayaga Muruga Pandy, N., 2018, November. "Reconstruction of patient-specific human femur with surgical drilling temperature data: A methodology applicable for robotic surgery," in Proceedings of International Conference on Applied and Computational Mathematics, IIT Kharagpur.

5. Pandithevan, P., Prasannavenkadesan, V. and Vinayaga Muruga Pandy, N., 2018, July. "Torque Minimization in Surgical Bone Drilling by Particle Swarm Optimization," in Proceeding of the International Conference on Mathematical Modelling and Scientific Computing, IIT Indore.

Mathematics

1. Shalu, M.A., Vijayakumar, S. and Sandhya, T.P., 2019, February. "The Induced Star Partition of Graphs". In Conference on Algorithms and Discrete Applied Mathematics (pp. 16-28). Kharagpur, India, Springer, Cham.

Physics

1. Naveen Kumar., Ashish Kumar., Ryusei Momosaki. and Subhashree Ojha, N.N., 2018, December. "Operating point maneuvering through non-reciprocal optical biasing in fiber loop mirror configuration", in Proc. PHOTONICS – 2018 International Conference on Fiber Optics and Photonics, ID 10576, IIT Delhi, India.

2. Ashish Kumar., Subhashree Ojha, N. N. and Naveen Kumar., 2018, December. "Highly sensitive and cost-effective optical fiber interferometer based pressure sensor", in Proc. PHOTONICS – 2018: International Conference on Fiber Optics and Photonics, ID 76, IIT Delhi, India.

3. Subhashree Ojha, N. N., Ashish Kumar. and Naveen Kumar., 2018, December. "Enhancing the sensitivity of interferometer with involvement of fiber loop mirror", in Proc. PHOTONICS – 2018: International Conference on Fiber Optics and Photonics, ID 75, 12-15 December, IIT Delhi, India.

4. Subhashree Ojha, N. N., Ashish Kumar. and Naveen Kumar., 2018, October. "Compact single mode single fiber MZI based strain sensor", in Proc. Students Conference on Optics and Photonics, P-24, Physical Research Laboratory, Ahmedabad.

5. Manimegalai, K., Tapas Sil. and Bera, P. K., 2018, April. "Free vibrations of tapered beam: an improved approximate solution", in Proceedings of the second international Conference on Frontiers in Engineering, Applied Sciences and Technology (FEAST), pp. 63-66.

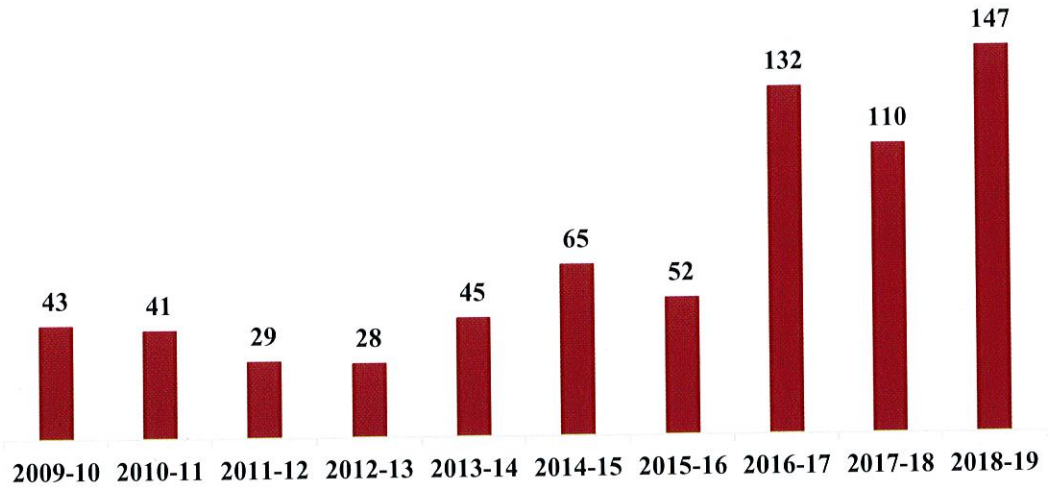
6. Volodin, V. A., Cherkova, S. G., Kumar, V., Sachkov, V.A., Mortet, V., Taylor, A., Remes, Z., Stuchlíkova T.H. and J. Stuchlík., 2018. "Nanocrystalline diamond films heavily doped by boron: structure, optical and electrical properties," in Proceedings of SPIE, International Conference on Micro- and Nano-Electronics 2018, 11022, pp. 110221G.

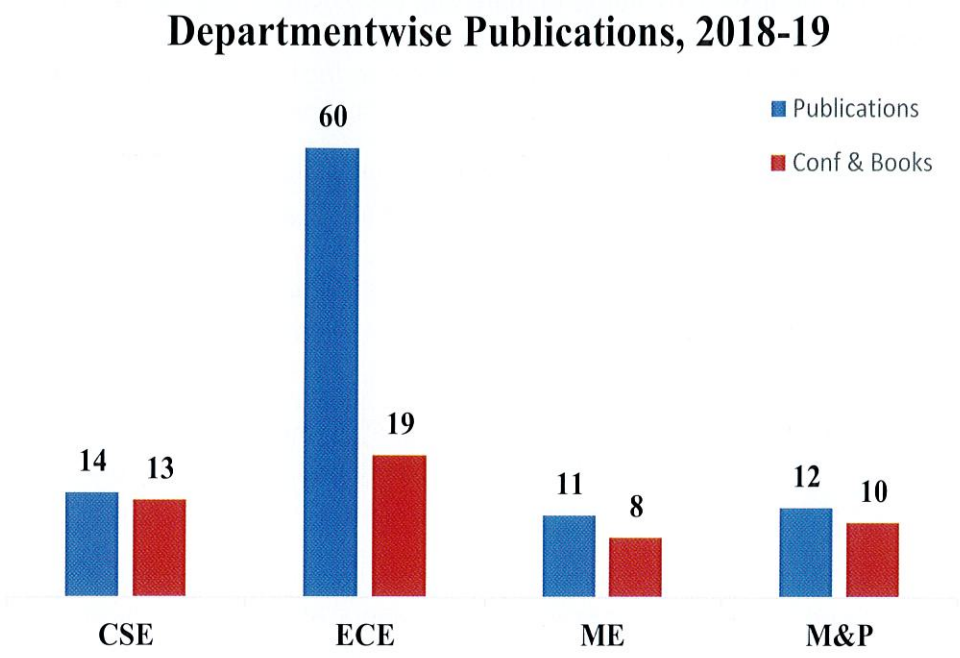
7. Jayachandra Bingi. and Pritam Shetty., 2018, December. "Fourier transform laser speckle lithography (FTSL) for structural bio-mimicry," National Laser Symposium (NLS-27), ID-4017, RRCAT, Indore, INDIA.

8. Jayachandra Bingi. and Murukeshan, V. M., 2018, December. "Spatial coherence assisted anomalous Speckle self-Interference in micro-scale regime," National Laser Symposium (NLS27), ID-4030, RRCAT, Indore, INDIA.

9. Ashok Kumar Reddy, Y., Ajitha, B. and Eswaraiah Varrla., 2019, January. "Enhanced UV photodetector performance in bi-layer TiO2/WO3 sputtered films," International Conference on Nano science and Nanotechnology (ICONN 2019), pp. 289, SRM IST, Chennai.

Total Publications





Awards, Foreign Assignments and Guest Lecture by Faculty

Awards / Foreign Assignments:

Dr M Sreekumar was deputed as Visiting Professor (2018) to the University of Genova, Italy, towards EMARO (European Master on Advanced Robotics) Programme, during May-June 2018 (One Month).

Guest Lectures/Other Activities:

1. Dr M Sreekumar delivered expert lectures during TEQIP III Sponsored One week workshop on Mechatronics and Manufacturing Automation (MMA-2018) organized by NIT Arunachalpradesh, during 29-30 Oct. 2018.

2. Dr M Sreekumar delivered special Lectures on Robotics and Automation at NIT Nagalandduring 31 Oct-4 Nov. 2018.

3. Dr M Sreekumar attended an Unnat Bharat Abhiyan 2.0 South Zone regional workshop on "Initiating UBA activities in village clusters adopted by Participating Institutes", Organized by IIT Madras on 3 Dec. 2018.

4. Dr. S. R. Pandian delivered an invited talk at the "Design Aspects of Products and Value Addition" Workshop organized by the Entrepreneurship Development Institute, MSME, Chennai on Sept 1, 2018.

5. Dr. S. R. Pandian delivered a presentation on "From Projects to Products: Innovation and Entrepreneurship" to students and faculty of Muthayammal Engineering College, Rasipuram on 29/9/2018.

6. Dr Sudhir Varadarajan delivered a plenary talk on "Systems Engineering, Design and Innovation" at LAMSYS 2018 (a conference on Large Scale Systems of National Importance organized by the Indian Society of Systems for Science and Engineering and ISRO SDSC-SHAR and Sathyabhama University) on Apr 2018.

7. Dr Sudhir Varadarajan served as an external examiner for the design stream of final year B.Tech projects in the Dept of Mechanical Engineering at IIT Madras on 14 May 2018.

8. Dr Sudhir Varadarajan delivered a plenary talk on "Design-Centric Engineering Education in India: The case of IIITDM kancheepuram" at ICRAAESCCT Conference, IFERP BVRIT Hyderabad on 13 July 2018.

9. Dr Sudhir Varadarajan delivered an invited talk on "What makes a great design? How engineers and managers can embrace design thinking" at Tech Mahindra's Initiative on Design, Chennai campus on 10 Aug 2018.

10. Dr Sudhir Varadarajan delivered an invited talk on "Fostering Industry-Academia Connect for Start-ups Incubation: A framework for incubation managers" at a training program for incubation managers organized by EDII, Govt of Tamilnadu at IITM research park, Chennai on 5 Sep 2018.

11. Dr Sudhir Varadarajan delivered a keynote talk on "Design - The crucial link between Technology and Innovation" at IIITDM, Chennai on 24 Sep 2018.

12. Dr Sudhir Varadarajan delivered an invited talk on "Systems Engineering for Complex Projects and Products" at ISRO, Sriharikota on 25 Sep 2018.

13. Dr Sudhir Varadarajan gave an invited talk on "Data Analytics and Quantitative methods for digital transformation" at ITC Grand, Chennai on 27 Sep 2018.

14. Dr Sudhir Varadarajan and Dr karthicnarayanan opened dialogue with select CII companies and SMEs for the benefit of MaDeIT and IIITDM on Oct-Nov 2018.

15. Dr Sudhir Varadarajan and Dr Karthicnarayanan gave an webinar talk on "Analytics for Manufacturing" on 30 Nov 2018.

16. Dr Sudhir Varadarajan presented an invited talk on "Systems Engineering and Innovation" at PSG Tech, Coimbatore on 12 Jan 2019.

17. Dr Sudhir Varadarajan chaired the Technical committee and also participated in the Steering Committee meeting of the Innovation Voucher Program launched by EDII and IDC, Govt of Tamilnadu on 15 Feb 2019 and 6 Mar 2019

18. Dr Sudhir Varadarajan participated in a panel discussion on "Academic institutions are gold mines for nurturing budding entrepreneurs" organized by PALS, an educational initiative of Alumni of IITs,at ICSR Auditorium IIT Madras on 16 Mar 2019.

Sponsored Research and Consultancy

I Sponsored Research

i) Completed as on 31 March 2019

1. Design and Development of energy efficient freeze dryer with multiport mini-channel shelf heat exchange

Principal Investigator : Dr. B. Raja;
Co-PI : Dr M. Sreekumar
Sponsor : DST - SERB
Duration : 3 Years (2014-17)
Value : 27.20 Lakhs

2. 5 axis STEP-NC (AP-238) Machining of Free Form / Irregular Contoured Surfaces

Principal Investigator : Dr. Arivazhagan A
Sponsor : DST
Duration : 3 Years
Value : 22.40 Lakhs

3. Design, development and characterization of all fiber interferometer for wavelength interleaving and temperature sensing applications

Principal Investigator : Dr. Naveen Kumar
Sponsor : DST
Duration : 3 Years
Value : 16.92 Lakhs

4. Design, development and performance evaluation of enhanced air-cooling in electronic systems

Principal Investigator : Dr.S. Jayavel
Sponsor : DST
Duration : 2 Years
Value : 15.05 Lakhs

5. Rural and Remote Ubiquitous Broadband Wireless Access

Principal Investigator : Dr. M.D. Selvaraj
Sponsor : UKIERI
Duration : 2 Years
Value : 15.84 Lakhs

6. Development of a Nanofluid Coolant for high heat flux devices with Mini-channel heat Exchanger

Principal Investigator : Dr. Raja B
Sponsor : DST
Duration : 3 Years
Value : 12.89 Lakhs

ii) Ongoing and Sanctioned during 2018-19

1. Early detection of Kidney abnormalities in noisy ultrasound images

Principal Investigator : Dr. Priyanka Kokil
Sponsor : DST-SERB
Duration : 3years (2017-20)
Value : 21 lakhs

2. Early detection of cataract: An IoT based approach

Principal Investigator : Dr. Priyanka Kokil
Sponsor : DST-SERB
Duration : 3 years (2017-20)
Value : 16.8 lakhs

3. Investigations on the Cell Phone Tower Radiation and Mitigation Techniques

Principal Investigator : Dr. M.D. Selvaraj
Sponsor : DST-SERB
Duration : 3 years (2018-21)
Value : 32.5 lakhs

4. Design, Development, Manufacture, and Evaluation of Laser Cut Stent Patterns for Enhanced Performance and Life

Principal Investigator : Dr M Sreekumar;
Co-PI: Dr. K. Jayabal
Sponsor : DST-AMT
Duration : 2 years (2018-20)
Value : 50 lakhs

5. Performance Evaluation and Modeling of Multi Agent Based Smart Manufacturing Integrated with Swarm Intelligence and IoT

Principal Investigator : Dr M Sreekumar (PI);
Co-PI: Dr. K. Premkumar
Sponsor : DST-ICPS
Duration : 3 years (2018-21)
Value : 35 lakhs

6. Vertex Separators and its Variants: Structural and Algorithmic Study

Principal Investigator : Dr Sadagopan
Sponsor : National Board for Higher Mathematics (NBHM), DAE, GOI
Duration : 3 years (2017-20)
Value : Rs 16.23 lakhs

7. On Spanning Trees - Generalizations and Variants (Theory and Algorithms)

Principal Investigator : Dr Sadagopan
Sponsor : DST-SERB
Duration : 3 years (2018-21)
Value : Rs 16 lakhs

8. Photo Induced Excess Charge Mediated Fluoride Ion Filtration

Principal Investigator : Dr. JayachandraBingi
Sponsor : DST-SERB
Duration : 3 years (2018-21)
Value : Rs 25.2 lakhs

9. Projects under Visvesvaraya PhD Scheme for Electronics and IT

Principal Investigators : Dr M Sreekumar and Dr Noor Mohammad
Sponsor : Ministry of Electronics and IT, GOI
Duration : 5 years (2016-21)
Value : 101.874 lakhs

10. Control and Operation of Agents in a Multi-Agent Fixturing System with Swarm Control

Principal Investigator : Dr M Sreekumar
Sponsor : University of Genova, Italy
Duration : 2 Years (2018-19)
Value : 17000 Euro

11. Design Innovation Centre

Principal Investigator : Dr. Naveen Kumar
Sponsor : DST
Duration : 3 years
Value : 18.00 Lakhs

12. Development of a computer - Assisted Surgical Methodology for Orthopedic - Bone Surgery

Principal Investigator: Dr. P. Pandithevan
Sponsor : DST
Duration : 3 years
Value : 19.14 Lakhs

13. Special Manpower Development Program for Chips to System Design

Principal Investigator : PI: Dr Noor Mohammad; Co-PI: Dr Binsu J Kailath
Sponsor : MEITY, Govt. of India
Duration : 3 years
Value : 92.4 Lakh

14. Teaching Learning Centre under the scheme Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching

Principal Investigator : Dr. S. Rajasekara Pandian
Sponsor : DHE-MHRD
Duration : 3 years
Value : 150 Lakhs

15. People counter for Bus

Principal Investigator : Dr.V.Masilamani; Co-PI:Prof.Banshidhar Majhi
Sponsor : Ms.Vamo Systems Private Limited, Chennai
Duration : 1 Year (2018-19)
Value : 2 Lakhs

16. Testing and Evalution of LoRA Modules

Principal Investigator : PI: Dr.S.S.Karthikeyan
Co-PI: Dr.K.V.Eswaramoorthy
Sponsor : Ms.Ensemble Tech. Pvt. Ltd, Chennai
Duration : 1 Year (2017-18)
Value : 1.77 Lakhs

17. Machine Learning Algorithms for Security Applications & Image Processing

Principal Investigator : PI: Dr.V. Masilamani, Co-PI:Prof.Banshidhar Majhi, Dr.Noor Mahammad
Sponsor : Forensics Intelligence Surveillance and Security Technologies Pvt. Ltd. Chennai
Duration : 2 Years (2018-20)
Value : 6 Lakhs

18. The phase structured coherent light beams for enhanced transmissions

Principal Investigator : Dr. JayachandraBingi
Sponsor : DST
Duration : 2 Years (2019-21)
Value : 16.90 Lakhs

19. Development of novel deep learning, visual serving approaches for improved detection of anti-tank mines using thermal vision assisted mobile robot

Principal Investigator : Mentor Prof. Banshidhar Majhi;
Mentee : Dr. Denis Ashok
Sponsor : DST -TARE
Duration : 3 Years (2019-22)
Value : 18.30 Lakhs

20. Development of 3D printed wearable Button Antenna for Soldier Performance Monitoring Applications

Principal Investigator : Dr.K.Senthilkumaran
Co-PIs : Dr.S.S. Karthikeyan (NIT Trichy),
Dr.K.V. Eswaramoorthy (IIITDM Kurnool)
Sponsor : DST – SERB (IMPRINT2)
Duration : 3 Years (2019-22)
Value : 50.53 Lakhs

21. Design and development of a dual band RF Energy Harvest for wireless sensor networks using Aerosol Jetting Technology

Principal Investigator : Dr.SS.Karthikeyan (NIT Trichy)
Co-PI : Dr. K. Senthilkumaran
Sponsor : DST – SERB (IMPRINT2)
Duration : 3 Years (2019-22)
Value : 50.94 Lakhs

22. Investigation on the effect of ZnO Nanowire Interface on the Moisture Diffusion and Mechanical Performance of Composites

Principal Investigator : Dr.S.Gowthaman
Sponsor : DRDO- RIC-CARS
Duration : 2 Years (2018-20)
Value : 9.87 Lakhs

23. Development of Novel Grid Synchronization Algorithm for Grid Interactive Photovoltaic Power Generation System

Principal Investigator : Dr.B.ChittiBabu
Sponsor : DST - SERB
Duration : 3 Years (2019-22)
Value : 35.54 Lakhs

24. Virtual energy storage based demand response algorithm to enhance the performance of the battery energy storage in smart grid

Principal Investigator : Dr. K. Vijayakumar; Co-PI: Dr. Damodharan P
Sponsor : DST - TMD
Duration : 3 Years (2019-22)
Value : 27.45 Lakhs

25. Development of an advanced electronic device for privacy in conversation over mobile phones using active noise control techniques

Principal Investigator : Dr. Asutosh Kar; CA: Prof. Banshidhar Majhi
Sponsor : Global Mantra Innovations Private Limited
Duration : 3 Years (2019-22)
Value : 29.88 Lakhs

26. Stability analysis of non-linear discrete dynamical systems subject to interference

Principal Investigator : Dr. PriyankaKokil
Sponsor : NBHM, DAE
Duration : 3 Years (2019-22)
Value : 13.12 Lakhs

27. Studies on the Strength and Durability of ZnO Nanowire / T1000 Carbon / Epoxy Composites for Flywheel Energy Storage

Principal Investigator : PI: Dr S Gowthaman; Co PI: Dr Venkata Thimmaraju Mallina
Sponsor : DST-TMD
Duration : 3 Years (2019-22)
Value : 44.52 Lakhs

28. Low cost and high efficiency portable thermoelectric cooler boxes for medicines, vaccines and bio-samples

Principal Investigator : Dr. S. Gowthaman
Sponsor : DST - TDT
Duration : 2 Years (2019-21)
Value : 11.03 Lakhs

29. Graphene-Silicon Nano-Wire Based Schottky Junction Solar Cells for Enchanced Light Harvesting

Principal Investigator : Dr. Vivek Kumar
Sponsor : DST-SERB
Duration : 3 Years (2018-21)
Value : 51.57 Lakhs

30. Complexity of Star Colouring and its Restricted Version

Principal Investigator : Dr. Shalu M A
Sponsor : DST-SERB
Duration : 3 Years (2019-22)
Value : 6.60 Lakhs

31. Simulation Study on Control System and Centralised Plant

Principal Investigator : Dr. K Selvajyothi
Sponsor : SRHVAC
Duration : 6 Months (2019)
Value : 1.95 Lakhs

32.Feasibility study on Computer Vision Based Angular Measurement of Wheels Without Markers

Principal Investigator : Dr. V Masilamani
Sponsor : Manatec Electronics
Duration : 3 Months (2019)
Value : 1.41 Lakhs

33. Wearable Thermoelectric Power Generator

Principal Investigator : Dr. Pandiyarasan
Sponsor : DST - Inspire
Duration : 5 Years (2018-23)
Value : 35.00 Lakhs

34. Metals Oxide based Thin Films for Photodetectors

Principal Investigator : Dr. Y. Ashok Kumar
Sponsor : DST - Inspire
Duration : 5 Years (2018-23)
Value : 35.00 Lakhs

35. National Mission Education Information Communication Technology (NMEICT)

Principal Investigator : Dr. Noor Mahammed
Sponsor : MHRD - BSNL
Duration : 10 Years (2019-29)
Value : 200.00 Lakhs

36. Performance Enhancement and Reliable Operation of Wind-PV Distribution System Supplying AC/DC Loads with Remote Condition Monitoring

Principal Investigator : Dr. Vijayakumar. K
Sponsor : DST SERB
Duration : 3 Years (2016-20)
Value : 7.14 Lakhs

37. Knowledge Graph for adverse drug reaction (ADR) association for safety signal detection using public safety database

Principal Investigator : Dr. Masilamani; Co-PI: Dr. Sivaselvan
Sponsor : Data Foundry Pvt. Ltd.
Duration : 1 Years (2019-20)
Value : 15.50 Lakhs

II Consultancy Projects

Sl. No.	Principal Investigator	Agency	Project Title	Amount, Rs.
1	Dr. T.S.Narayanan	Ms.Nanocell Networks Private Limited, Bangalore	IP Multimedia Training for Torry Harris Business Solutions	1,06,200
2	Dr.Karthik Narayanan and Dr.Suresh Varadharajan	Ms.Tube Investments of India Ltd, Chennai	Smart Manufacturing Pilot Project (Phase - I)	77,880
3	Dr.T.S.Narayanan	Ms.Timmins Training Consulting, Malaysia	Software Design Network (SDN) Workshop	98,000
4	Dr.T.S.Narayanan	Ms.Nanocell Networks Private Limited, Bangalore	IP Networking, Samsung, South Korea	1,15,640
5	Dr.T.S.Narayanan	Ms.Timmins Training Consulting, Malaysia	Software Defined Wide Area Network (SD-WAN) Workshop	28,800
6	Dr. Noor Mohammad	UCALL Fuel System Ltd.	LB CRG for others training program of microcontroller & interface	67,850

Teaching Learning Centre (TLC)

Teaching Learning Centre for Design and Manufacturing Education

The Teaching Learning Centre (TLC) for Design and Manufacturing Education at IIITDM Kancheepuram was established in October 2015, under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of Ministry of Human Resource Development (MHRD). The main objective of the TLC is the design, development and dissemination of innovative and [extremely] affordable laboratory instruction modules for design and manufacturing education using open source hardware and software, through Do It Yourself (DIY) or Build Your Own (BYO) methodologies. The TLC is also active in schools outreach initiatives, to inculcate creative hands-on teaching learning pedagogies for high schools in the areas of design and manufacturing through robotics, electronics and coding.

Quarterly Events Conducted During 2018-19

Events List: April – July 2018

S No	Program	Type of Program	Venue	Date	Number of Participants
1	Hands-on workshop on Kinetic Art	Workshop	Design Innovation Centre, Banaras Hindu University	6/04/2018	30
2	Hands-on workshop on Build Your Own (BYO) low-cost laboratory equipment	Workshop	Teaching Learning Centre, IIT BHU, Varanasi	7/04/2018 to 9/04/2018	60
3	Hands-on workshop on Arduino for Shri Ram Foundation Staff	Workshop	TLC, IIITDM – Kancheepuram	17/04/2018 to 18/04/2018	6
4	Fresh Faculty Induction Training Program	Training	TLC, IIITDM – Kancheepuram	7/05/2018 to 30/05/2018	71
5	Hands-on workshop on Arduino for InnoSTEAM Lab	Workshop	Government High School, Doddenkundi, Bangalore	17/06/2018 to 19/06/2018	19
6	Hands-on workshop on Arduino for InnoSTEAM Lab	Workshop	IIITDM – Kancheepuram	20/06/2018 to 22/06/2018	64
7	Talk on Innovative STEAM Education to school teachers	Leadership	The Shri Ram Schools, Gurgaon & Vasant Vihar, New Delhi	28-06-2018	550
8	Summer interns from colleges, institutes and universities	Training	TLC @ IIITDM	15-05-2018 to 15-07-2018	22
7	Hands-on lab sessions for government high school children through Tinkering Labs	Workshop	TLC, 8 government high schools in Chennai, 5 schools in Bangalore	01/04/2018 to 30/06/2018	1125
Total					**1947**

Events List: July – September 2018

S No	Program	Type of Program	Venue	Date	Number of Participants
1	Hands-on workshop on Arduino for Shri Ram Foundation Master Trainers	Workshop	TLC, IIITDM – Kancheepuram	23/07/2018 to 28/07/2018	25
2	Light Workers Student Visit	Industrial Visit	TLC, IIITDM – Kancheepuram	4/9/2018 & 7/9/2018	60
3	Hands workshop on Open Source Laboratory Development	Credit Course/ Workshop	Veltech University	25/08/2018, 01/09/2018 & 17/09/2018	30
4	Japanese volunteers (School Service from Nagasaki University)	Service Training	TLC, IIITDM – Kancheepuram	16/08/2018 to 23/09/2018	4
5	Japanese volunteers (Nagoka University)	Training	TLC, IIITDM – Kancheepuram	23/08/2018 to 26/09/2018	1
6	Design Aspects of Products and Value Addition	Workshop	Entrepreneurship Development Institute, MSME, Chennai	01/09/2018	20
7	DIY underwater robotics for fisheries	Lecture-cum-Demo	Tamil Nadu Fisheries College & Research Institute, Chennai	17/09/2018	80
8	Project-based Learning for Innovation and Entrepreneurship	Lecture	Veltech University	25/8/2018	40
9	From Projects to Products: Innovations and Entrepreneurship	Lecture	Muthayammal Engineering College, Rasipuram	29/09/2018	120
10	InnoSTE(A)M Labs	Training (with SRF Foundation)	8 government high schools in Chennai	July-Sept 2018	800
11	InnoSTE(A)M Labs	Training (with SRF Foundation)	5 government high schools in Bengaluru	July-Sept 2018	325
Total					**1505**

Events List: Oct. – Dec. 2018

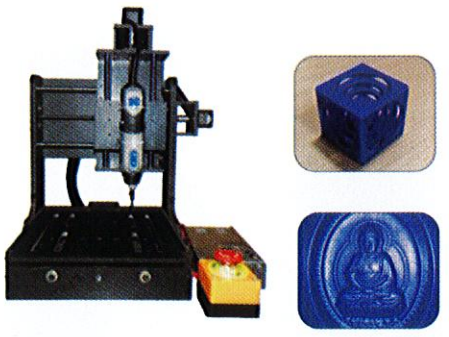
S No	Program	Type of Program	Venue	Date	Number of Participants
1	Rapid prototyping for student projects	Technical support and fabrication to student orders	TLC, IIITDM – Kancheepuram	01/11/2018 & 30/11/2018	60
2	Design Aspects and Value Addition	Workshop (for MSME women entrepreneurs)	Entrepreneurship Development and Innovation Institute	09/11/2018	20
3	Display of TLC technologies and student projects Kreatura-2018	Lecture-cum-Demo	Lightworkers Academy (high school), Chennai	17/11/2018	350
4	Technical consultations with administrators and teachers	Visit and consultations	Blind Relief Association, Delhi school for visually impaired	20/11/2018	15
5	Collaborative discussions with teachers	Discussions	The Shri Ram Schools, Delhi/Gurgaon	20/11/2018	15
6	Cognitive Skills, Design Thinking and Critical thinking	Lecture	Institution's Innovation Council, Panimalar Engineering College, Chennai	28/11/2018	100
7	NRC DIY Manufacturing Technology course	Hands-on MOOC	SWAYAM	15/11/2018 - ongoing	427
8	Training in 3D printer and DIY machines fabrication	Training for TLC IIT Hyderabad staff	TLC, IIITDM Kancheepuram	22/11/2018 – 30/11/2018	2
9	Internships (unpaid) for engineering college/ university students	Hands-on training and fabrication	TLC, IIITDM Kancheepuram	01/10/2018 - ongoing	12
10	Display of TLC technologies and student projects	Lecture-cum-demo	Cluster-level event for teachers and students of eight government high schools, Chennai	05/12/2018	600
11	Hands-on Workshop on Robotics and Automation	Workshop	PSR Engineering College, Sivakasi	11/12/2018 to 13/12/2018	30
12	Design Aspects of Products and Value Addition	Lecture-cum-Demo	Entrepreneurship Development Institute, MSME, Coimbatore	12/12/2018	40
13	NRC DIY Manufacturing Technology course	Hands-on MOOC	SWAYAM	15/11/2018 – 28/02/2019	545
Total					**1001**

Events List: Jan. – Mar. 2019

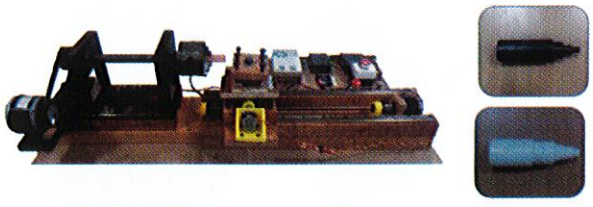
S No	Program	Type of Program	Venue	Date	Number of Participants
1	Dr Suresh Reddy (Director, SRF Foundation) and Family	Visit to TLC	TLC, IIITDM Kancheepuram	05-01-2019	4
2	Japanese Students of from Nagaoka University of Technology and administrator	Visit to TLC	TLC, IIITDM Kancheepuram	08-01-2019	7
3	Principal and faculty from Muthayammal Engineering College	visiting TLC	TLC, IIITDM Kancheepuram	09-01-2019	4
4	Robotics Lab Opening	Inauguration	LWA School, Nallambakkam	19-01-2019	400
5	Bengaluru school students	Visit to TLC, for FIRST FTC mentoring	TLC, IIITDM Kancheepuram	20-01-2019	10
6	TLC's DIY CNC machine exhibit	Indian Machine Tool Manufacturers' Association	Bengaluru	24 to 30-01-2019	300
7	3D printing workshop and hands-on demo	Workshop	Veltech University, Chennai	25-01-2019	45
8	Japanese professor from Nagaoka University of Technology	Visiting TLC	IIITDM Kancheepuram	29-01-2019	1
9	Design Innovation Centre, IIITDM	EDII Workshop on Design & visit to TLC	IIITDM Kancheepuram	02-02-2019	40
10	Design Innovation Centre, IIITDM	EDII Workshop on Design & visit to TLC	IIITDM Kancheepuram	19-02-2019	35
11	School for visually impaired children	Workshop	Blind Relief Association, New Delhi	10-02-2019	50
12	Kandigai Government High School Annual Day	TLC Machines Demo	Kandigai GHS	01-02-2019	500
13	RMD College of Engineering, Chennai students	Visit to TLC	TLC, IIITDM Kancheepuram	02-02-2019	135

14	Ms. Aparna, Freedom Trust, Chennai	Visit to TLC	TLC, IIITDM Kancheepuram	18-02-2019	1
15	RMD College of Engineering, Chennai students	Industrial Visit to TLC	TLC, IIITDM Kancheepuram	18 to 19-02-2019	121
16	Nigeria student visit on TLC	Visiting TLC	TLC, IIITDM Kancheepuram	04-03-2019	1
17	Sakura Science Club team	Visit to university, schools, and industries	Nagasaki University, Japan	08 to 15-03-2019	15
18	Talk on innovations through student makerspaces to II year BTech students	Seminar	IIIT Sri City	19-02-2019	200
19	Professor SAHA Institute of Nuclear physics	Demo of TLC machines	TLC IIITDM Kancheepuram	25-03-19	2
20	Visit by Maharishi Vidya Mandir and Ramco Group high school teachers and students	Visit to TLC	TLC, IIITDM Kancheepuram	29-03-2019	36
Total					**1907**

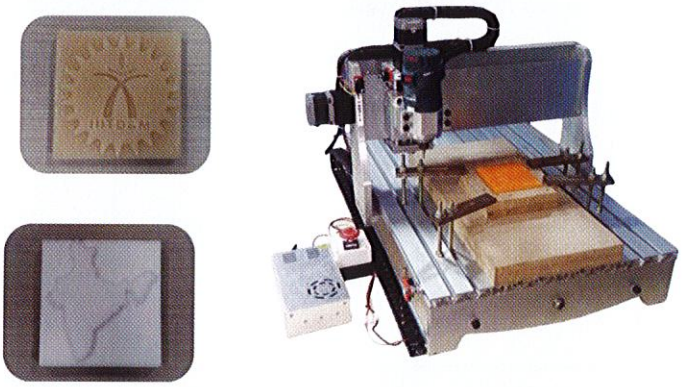
Affordable DIY systems developed



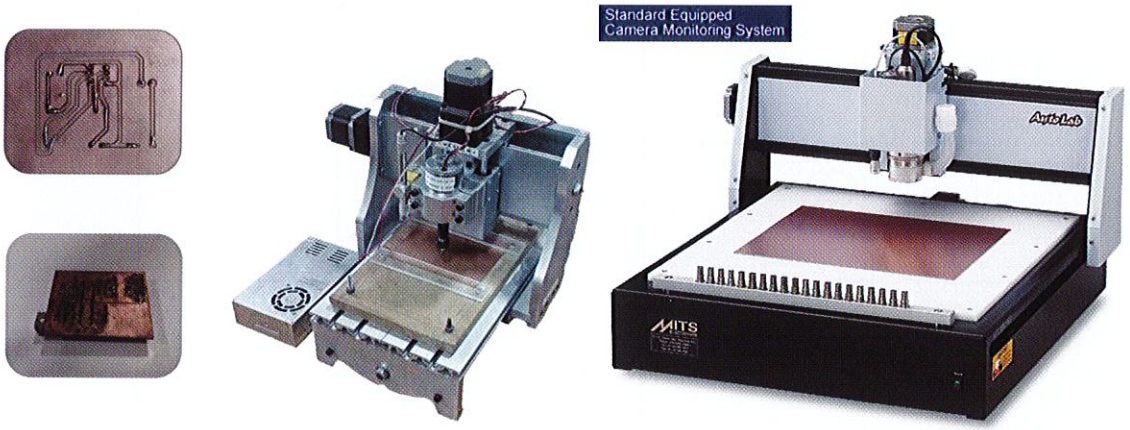
TLC DIY Low-cost Desktop CNC Mill, with sample parts



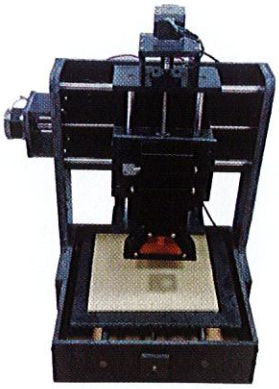
TLC DIY Low-cost Desktop CNC



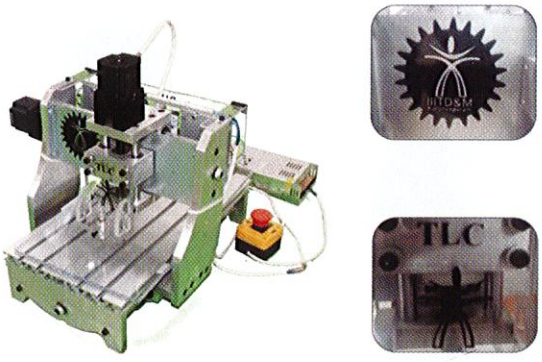
TLC DIY Low-cost Desktop CNC Router



TLC DIY Low-cost Desktop PCB Machine (left) and Imported IIITDM PCB Machine (right)



TLC DIY Low-cost Desktop CNC Laser Engraver

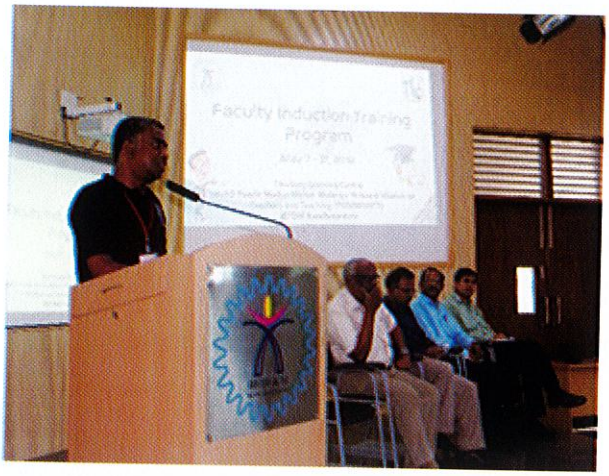


TLC DIY Low-cost Desktop CNC Vinyl Cutter

TLC DIY Low-cost Foam Cutter

TLC DIY Low-cost Acrylic Sheet

TLC DIY Low-cost Steel Panel Cart



TLC organized a one-month fresh faculty Induction Training Program (ITP) for new faculty of universities, engineering colleges and polytechnics from around the country, during May 7-31, 2018. Around 60 faculty including from IIITDM attended the workshop.

TLC Staff conducted a Hands-on Workshop on Arduino for SRF Foundation (SRFF) Master Trainers, as part of Capegemini-SRFF-TLC school adoption program, 25 teachers from 54 high schools in 9 cities around India attended the 6-day workshop in TLC from July 23-28.

As a part of engineering curriculum, TLC conducted an 1-credit course "Open source Laboratory development" for Dept. of CSE, Veltech University, Chennai. 30 students enrolled for the 3-day workshop in September.

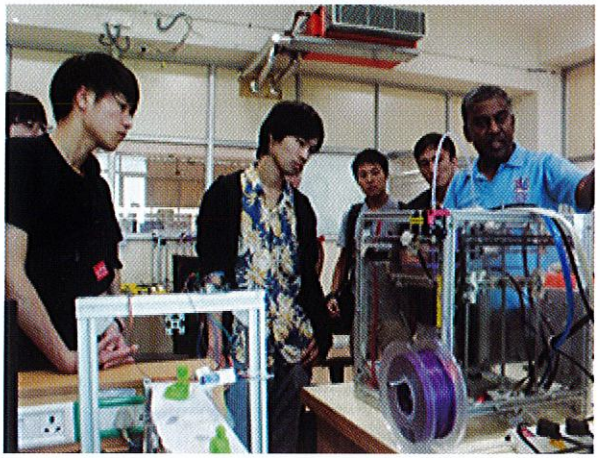
60 Students and a teacher from Lightworkers Academy, Nallambakkam visited TLC facilities Sept. 9, 2018. The school is setting up a Robotics Lab with support of TLC. Mr Kazuya Miyagawa, an intern from Nagoka University of Technology, Japan is seen demonstrating an underwater robot he designed to the students.

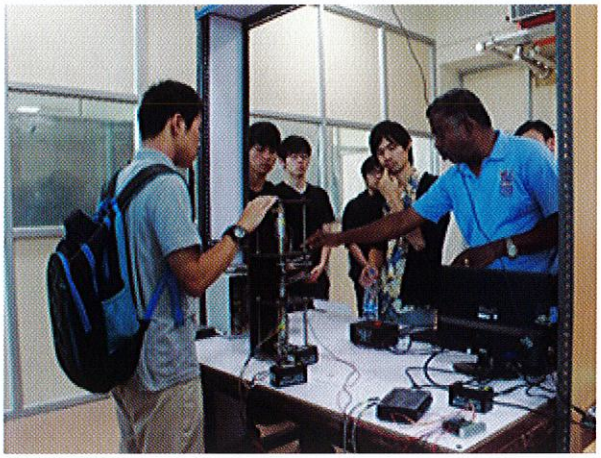
Four students from Nagasaki University, Japan volunteered with TLC-assisted local government and private high schools in Chennai. They taught Japanese language and culture (origami, cooking and lifestyle) during Aug-Sept.

MTech Smart Manufacturing students of IIITDM developed eight low-cost CNC Milling Machines. The Machines were handed over to the eight government high schools supported by TLC under the Capgemini-SRFF school adoption program Tinkering Labs on 21/09/2018.

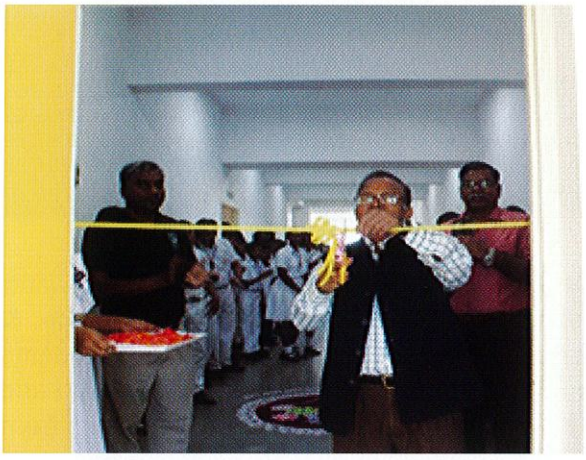
Dr S R Pandian delivered a talk on underwater robotics to Tamil Nadu Fisheries College & Research Institute, Chennai faculty and students on Sept. 17. Mr Miyagawa from NUT, Japan and Mr Ryo Itachiyama, student volunteer from Nagasaki University, Japan demonstrated their underwater robot during the visit.

Mr. Madhu Kumar and Mr. Subash Kannan from SRF, Bangalore fabricated five CNC Mill machines in a span of 12 days with technical support from TLC engineers from 6th October to 17th October 2018. The machines will be used in the five-government high school Tinkering Labs in Bangalore supported by Capgemini and SRFF.

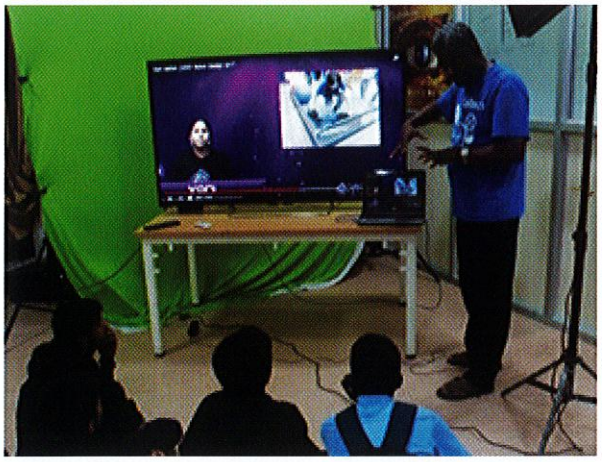




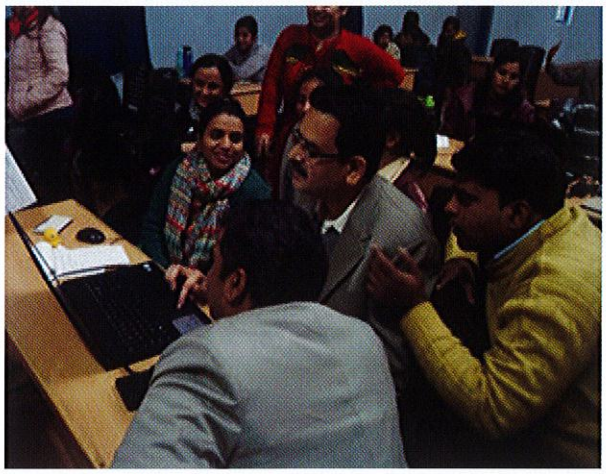
Seven Japanese interns and one official from Nagaoka university, Japan visited TLC Labs.



A Robotics and Innovation Lab to promote student innovations was inaugurated in Lightworkers Academy, Nallampakkam by Prof. Banshidhar Majhi, Director. 3D printers, Milling Machine and Underwater robots from TLC were showcased to students, parents and visitors of the school.



10 STEAM lab students from a Bengaluru Government high school along with their mentors and SRF Foundation project engineers visited TLC and discussed their plans and strategy for their participation First Tech Robotics competition 2019.



Dr S R Pandian along with two TLC staff conducted a 2-day hands-on workshop from 10/2/2019 to 11/2/2019 in Blind Relief Association school for the visually impaired in New Delhi on the use of 3D printers and CNC machines for developing custom teaching materials for the classroom

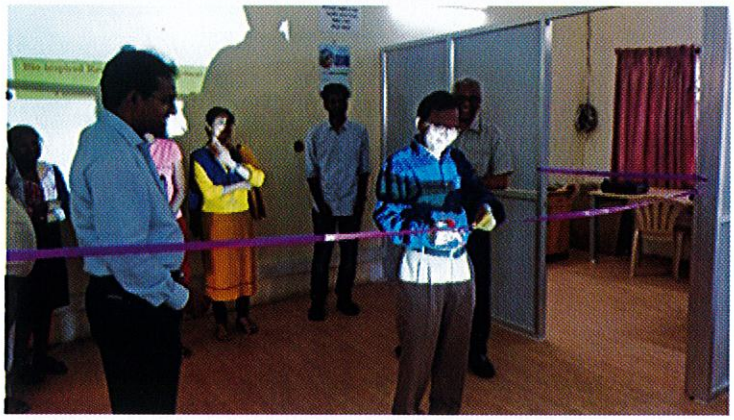
Group of 20 students and teachers from Government High school, Kandigai, Lightworkers Academy, Nallambakkam and TLC staff and research scholars from IIITDM and IISc Bengaluru visited Japan during March 7 – 15, 2019 under 'Sakura Science plan' at the invitation of Nagasaki University which has MOU with IIITDM. They visited Nagasaki University research labs, local manufacturing industries, and met with mayor of Nagasaki city.

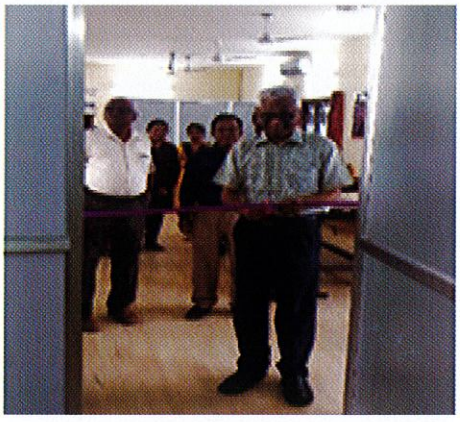
TLC 's "Low Cost Build Your Own Three Axis CNC Mill" won 2nd prize of Rs 25,000 in the product demo event organized by Indian Metal-Cutting Machine Tool Exhibition (IMTEX) in Bengaluru from January 24-30.

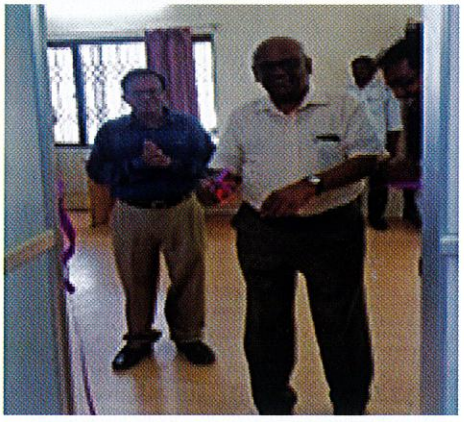
Mr. Ajah Victor, a research scholar from University of Nigeria, Nsukka visited TLC during March 4-5, and expressed interest in adapting some of the TLC technologies for use in Nigerian universities and schools.

Bio-inspired research and Development (BiRD) Laboratory & Photonic Devices and Sensor (PDS) Laboratory

The research laboratory dedicated to bio-inspired and photonic based research has been inaugurated on 31 Jan. 2019 by honorable Director of IIITDM, Prof. BhansidharMajhi, Prof. C. Vijayan, Professor, IIT Madras and Prof. S.P. Venkateshan, Emeritus professor, IIITDM Kancheepuram. The laboratory is established with the unique combination of Bio-inspired engineering, Laser spectroscopy, Design and modelling, Electronics and Chemistry. The lab perspective, present works and long-term goals are explained to the dignitaries presented in the event.







Workshop on Photocatalytic Technology And Innovation Wpti-2k18, (24-25 September 2018)

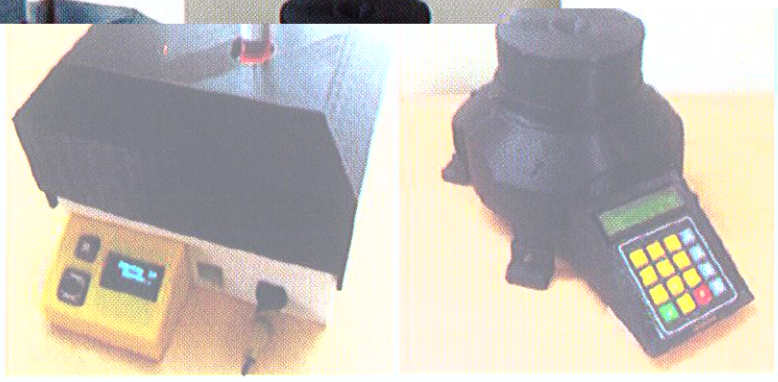
The workshop is jointly conducted by IIITDM Kancheepuram and AMET university as a part of the strategic collaboration, in AMET University. The workshop is inaugurated by the head of the institutions of IIITDM Kancheepuram and AMET University. The AMET University felicitated Prof. Bhansidhar Majhi as a token of gratitude. The invited speakers include eminent professors from IIT Madras and other institutions of Tamilnadu.

Student Participated and Won the Regional Prize in the Exhibition Organised by Aditya Birla Group

The project student from Bio-inspired research and development Laboratory (BiRD Lab) Ms. K. Bhavana participated in, Reinventing the Future Manufacturing Exhibition and won the regional prize for her best bio-inspired ideas. The jury were fascinated by bio inspired design concept and I won accolades from esteemed members from various automotive industries like bajaj, Hyundai, Daimler etc. The Event organizers also appreciated IIITDM Kancheepuram and awarded the institute of design shield

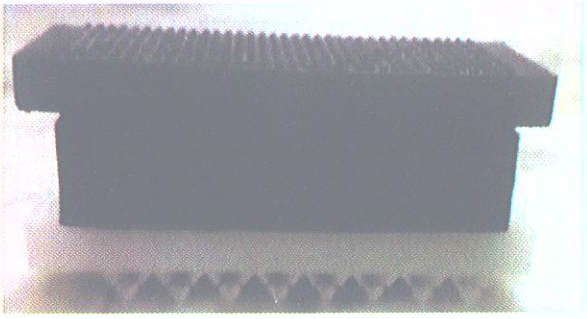
Invited talk by Dr. Dmitry N Makshimov, Kiransky institute of Physics, Krasnoyarsk, Russia3 Jan. 2019

Prototypes Developed



Milk Fat Detector

Spin Coater



Bio-inspired keeping cool patch

MaDeIT Innovation Foundation

MaDeIT Innovation Foundation is a not-for-profit Section 8 Company under the Companies Act, 2013, incorporated on 10thAugust, 2016. It is a design-driven Technology Business Incubator promoted by the IIITDM Kancheepuram and supported by a grant from the Department of Science and Technology (NSTEDB Division), Govt. of India. MaDeIT encourages startups and SMEs in the manufacturing and healthcare sectors.

As on 1 Apr 2017, MaDeIT had two incubatee companies in its portfolio (CUEDIO Technologies and Olog Logistics). During the financial year 2017-18, MaDeIT added six more companies to its portfolio (Cavintek Software, Lucid Software, SSD Controls, ThoughtBit Technologies, Equad Engineering Services and Inoventric Sustainable Solutions). Most of these companies are in the thrust areas of manufacturing and healthcare, and the products being developed are aligned with IIITDM's competencies in mechanical, hardware and software components.

During the financial year 2018-19, MaDeIT organized a series of invited talks, industry events and sandbox programs to develop the pipeline of incubatees and attract good student interns for the incubatee clients. The details are presented below.

Incubatee Founder Meet (28 Apr 2018)

On 28 Apr 2018, MaDeIT organized an Incubatee Founder Meet to facilitate interaction between the founders and IIITDM faculty members. Founders of Equad Engg, ThoughtBit, Inoventric, and SSD Controls provided an overview of their products that they are incubating with MaDeIT.

Hackathon on Medical Technologies (11-13 May 2018)

Between 11-13 May 2018, MaDeIT co-sponsored a hackathon on Medical Technologies. The hackathon was organized by the Healthcare Technology Incubation Centre, IIT Madras in the IITM Research Park. Four of these teams were from IIITDM Kancheepuram and two of them came in the top ten. The winning team got an opportunity to pre-incubate at HTIC, IITM with a funding of Rs 20,000. The team was also partly sponsored by MaDeIT to attend the AICTE Indo-Canadian contest in New Delhi in late June 2018.

Summer Sandbox Program (14 May 2018)

On 14 May 2018, MaDeIT started its summer sandbox program. The program is aimed at supporting pre-incubation activity among students and accelerating the work of existing incubatee companies. About 35 students from IIITDM have participated in this program out of which two teams (8 members) are exploring pre-incubation activities.

Strategic Advisory Board Review Meeting (2 Jun 2018)

On 2 Jun 2018, MaDeIT had its fourth meeting with the Strategic Advisory Board to review its operations and strategy for the future. The meeting was presided by Prof. Majhi, Chairman of MaDeIT, and was attended by most of the Advisory Board Members. The Advisory Board members were given a demonstration of the prototypes developed by CUEDIO and Cavintek. They also interacted with the incubatee founders over lunch.

ACMEE 2018 Participation (21-25 June 2018)

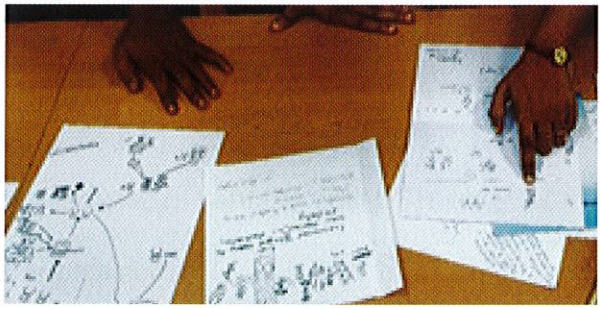
Between 21-25 June 2018, MaDeIT participated in the well-known ACMEE 2018 industry exhibition held in Chennai Trade Centre. MaDeIT put up a stall and showcased the work of its incubatee companies and its design and incubation services.

Entrepreneurship Workshop for Women (29 Jun 2018)

On 29 Jun 2018, MaDeIT organized an exclusive workshop for women interested in entrepreneurship. The event was sponsored by the Entrepreneurship Development and Innovation Institute (EDII), Govt of Tamilnadu. The workshop was inaugurated by Dr Kalaivani, Joint Director, EDII. About 55 women participated in the event. At the end of the workshop about 30 signed up for attending a follow up workshop in August.

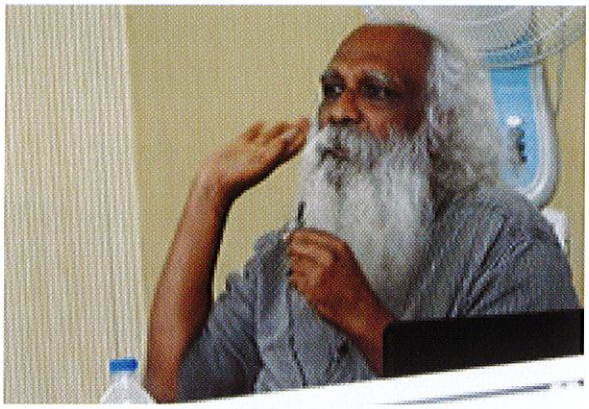
Workshop for ISRO SDSC-SHAR on Experiential Learning

On 11 July 2018, Dr Sudhir Varadarajan conducted an exclusive workshop for ISRO SDSC-SHAR on Experiential Learning. About 30 engineers in the 10-15 years-experience band participated in the workshop. They were taken through exercises that promoted a deeper inquiry into their personal and collective experience in launching multiple satellites and increased frequency of launches. The participants felt refreshed and rated the workshop very high.



Experiential learning workshop for ISRO middle managers conducted by Dr Sudhir Varadarajan

On 30 Jun 2018 MaDeIT organized an exclusive workshop for incubatee companies, IIITDM faculty and participants of the summer sandbox program. It was titled "Child is the father of man: What innovators can learn from children". The workshop provided a fresh perspective on learning, playfulness and improvisation in children and the implications for innovation. The workshop was facilitated by well-known design thinker Mr Jinan Kodapully from Existential Knowledge Foundation.



Workshop on Biomimicry (4 August 2018)

On 4th August 2018, MaDeIT organized a "Bio-inspired Design"workshop for SMEs, Startups and students. The program was anchored by experts from the Biomimicry India network - Mr. Prashant Dhawan and Ms. Seema Anand.

Workshop on Video Ethnography (18 August 2018)

On 18th August 2018, MaDeIT organized a workshop on video ethnography for Startups and IIITDM community. The workshop involved screening of an ethnographic film "Kashi Labh" by Mr. Rajat Nayyar, followed by discussion on the aesthetics of death and its relevance to design thinking.

Addition of 2 New Incubatees (27 August 2018)

On 27th August 2018 MaDeIT conducted its fifth round of incubatee selection. Two companies – Vamosystems (people counter) and Digi2o (automotive electronics) – that were selected have subsequently signed the contract with MaDeIT. MaDeIT currently has 10 companies in its portfolio.

Summer Sandbox Pre-incubation (May-Sep 2018)

Two teams (eight students) that participated in the summer sandbox programme (May-Sep 2018) successfully completed their prototypes. A bi-product of this work was the design of a new digital lactometer. This work was guided by Dr Jayachandra Bingi.

Advancing Design Thinking & Product Innovation (8 Jan 2019)

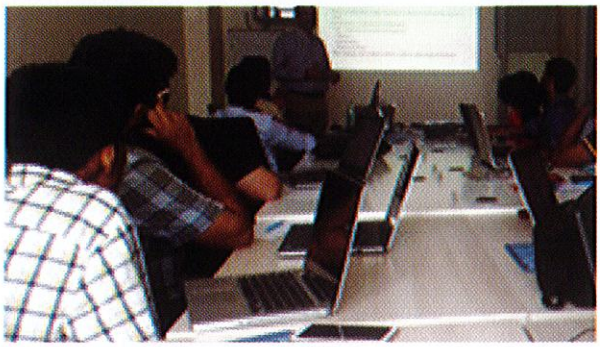
As part of the MHRD Institute Innovation Council, organized for the live webcast of the leadership talk by Mr Anand Mahindra. The talk was attended by 200+ students, 4 faculty members.

Invited Talk on IP Management and IPR (11 Jan 2019)

As part of the MHRD IIC, organized an invited talk on IP Management and IPR by Ms Anuja Aiyappan, Patent Attorney at Ericsson Global Services, Chennai. About 80 students, 5 faculty members participated in the same.

Two-Day Hands-On Workshop "Smart Contracts with Blockchain" (1-2 Feb 2019)

MaDeIT organized a two-day hands-on workshop "Smart Contracts with Blockchain" to promote awareness of the blockchain technology among incubatee companies and students. The workshop was delivered by an industry expert Mr Srikant Madduri. It was attended by about 20 participants including professionals from Lucid Technologies, Thought Bit and Tech Mahindra.



The First Hackathon on Smart Products (9 Feb 2019)

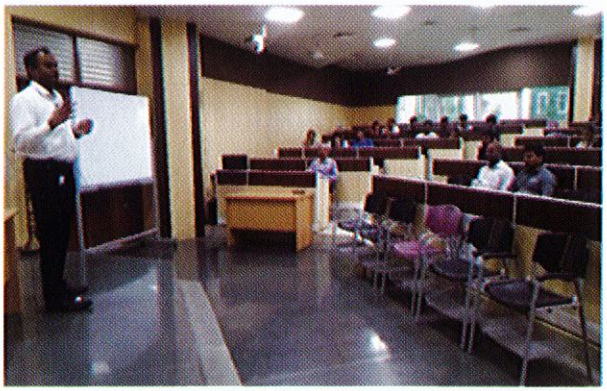
The first hackathon on smart products included 55 teams. About 210 students from third year PDP course participated in the hackathon and tried to accelerate their smart product prototypes. Teams made meaningful progress through this one-day event.

The Second Hackathon on Smart Products (24 Mar 2019)

The second hackathon on smart products included 130 teams. About 420 students from 2nd and 3rd year participated in the hackathon and tried to accelerate their smart product prototypes.

Other Industry Outreach Programmes Organized

4 Oct 2018: Senior executives from Daimler visited IIITDM, interacted with students and delivered a talk on digital trends in automotive manufacturing.



Mr Sriram,
VP Manufacturing at Daimler India Commercial Vehicles interacting with IIITDM community

Oct 2018: MaDeIT participated in the CII-Automotive Design Conference to promote incubation opportunities. The event helped generate useful leads for MaDeIT and IIITDM.

MaDeIT stall at CII Automotive conference

30 Nov 2018: As a member of the CII initiative on Manufacturing and Digital Excellence, Dr Sudhir Varadarajan facilitated a webinar by IIITDM faculty on Analytics for Manufacturing. The webinar was delivered by Dr Karthicnarayanan. About 80 CII-SR members participated in the webinar.

4 Jan 2019:Mr Sundar, Head of Strategic Initiatives, JK Fennerand Mr Srihari, HR Head, JK Fenner, Chennai delivered a talk to IIITDM students

18 Feb 2019: IIITDM signs a MoU with NASSCOM CoE for Data Science, Artificial Intelligence and IoT. This partnership will focus on developing the ecosystem to support industry 4.0 initiatives in the manufacturing sector.

Prof. Banshidhar Majhi, Director IIITDM with Mr Nagarajan Rao, Director, NASSCOM COE for DSA with the MoU

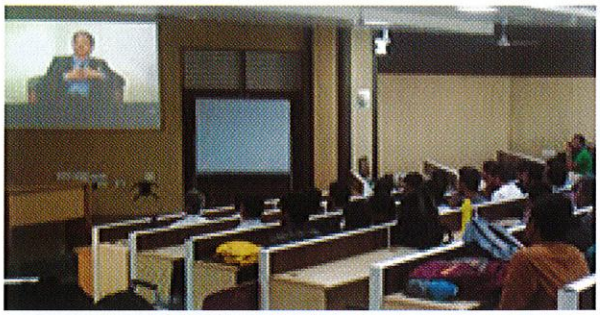
Institute Innovation Center (IIC)

November 2018: IIITDM formed an Institute Innovation Council (IIC) to channel student-led innovation activities in the institute. The IIC includes 12 student members, 3 faculty members and 3 industry experts. IIITDM also participated in the inaugural Atal Ranking of Institutions on Innovation Achievement to benchmark against the other institutions.

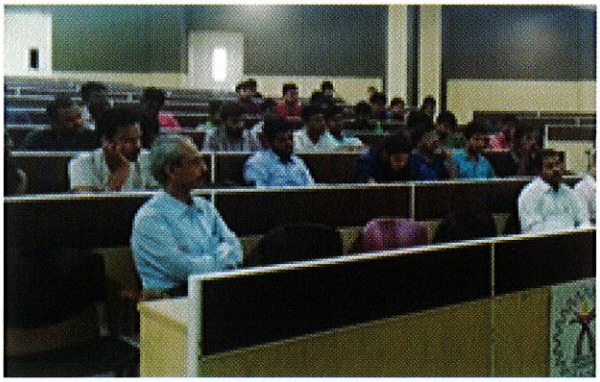
8 Nov 2018: As a first step the IIC expanded the scale of EHIPASSIKO Winter, an event organized to showcase output of a few design courses. Key data points of the event are summarized in the picture below.

Snapshots of EHIPASSIKO Winter 2018

8 Jan 2019: As part of the MHRD Institute Innovation Council, organized for the live webcast of the leadership talk by Mr Anand Mahindra. The talk was attended by 200+ students, 4 faculty members.



Students listening to the leadership talk by Mr Anand Mahindra, organized by MIC, MHRD



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Ms AnujaAiyappan from Ericsson giving a talk on IPR

Design Innovation Center (DIC)

This Design Innovation Centre (DIC) has been established in 2017 to inculcate, facilitate and spread the culture of innovation among the students, faculty, aspirants and relevant stake holders through innovative engineering and industrial design oriented courses, special training workshops, internships on product design, seminars by experts, organizing design competitions, industrial visits and outreach activities. The following are the events organized by DIC

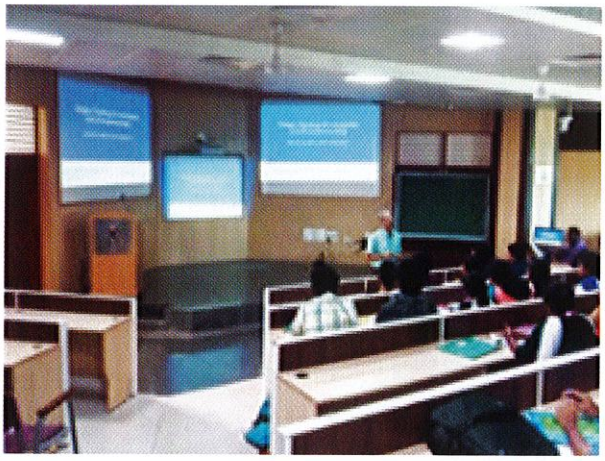
Design Centric Approach Workshop

Design Centric Approach workshop conducted by Design Innovation Centre, IIITDM Kancheepuram in association with EDII TN for two batches on Feb.1-2, 2019 (Batch 1) and Feb.19-20,2019 (Batch 2).

Batch 1: (Feb.1-2 2019)

A total of 32 students from various colleges have participated in the Workshop. The students were introduced to design centric based approach thinking though various presentation sessions like Design Thinking for Innovation and Entrepreneurship, Design History, Product Realization using Arduino, Hands on experience workshop, Product design: Future and scope, Hands on experience on Arduino.

Sessions by Dr. Sudheer Varadharajan and Dr. Naveen Kumar



Sessions by Dr. Munesh Singh and Mr. Dhanasekaran

Batch 2: (Feb.19-20 2019)

A total of 20 students from various colleges have participated in the Workshop. The students were introduced to design centric based approach thinking though various presentation sessions like Design Thinking for Innovation and Entrepreneurship, Design History, Product Realization using Arduino, Hands on experience workshop, Product design: Future and scope, Hands on experience on Arduino.

Sessions by Dr. Naveen Kumar & Mr. Dhanasekaran

Centre for AI, IoT and Robotics

India is already on the path of a digital revolution and the next step is utilizing the big data generated to take intelligent decisions to serve the entire population. Since the effectiveness of AI, machine learning, robotics and cognitive automation increases in direct proportion to a rise in the quality and quantity of training data that the systems are exposed to, the conditions are ripe for India to emerge as a leader in AI. Recognizing AI's potential to transform economies and the need for India to strategize its approach, Hon'ble Finance Minister; in his budget speech for 2018 – 2019, mandated NITI AAYOG to establish the National Program on AI, with a view to guiding the research and development in new and emerging technologies. IIITDM Kancheepuram has established the "Center of Excellence (CoE) in AI, IoT and Robotics" in February 2019 which would also support GoI schemes such as Make in India, Digital India, Start-up India, Skill India and Smart City Scheme. Around 25 Lakh fund has been allocated for the centre, initially, by the Director for the procurement of core equipments.

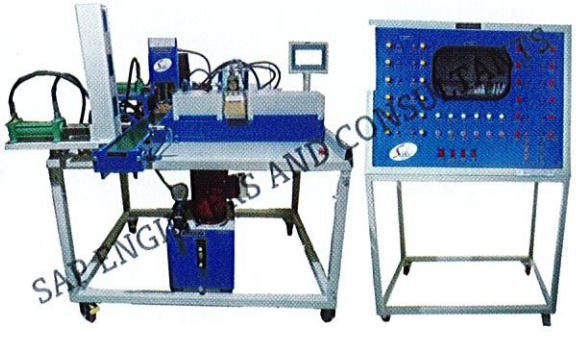
Vision and Objectives

To overall objective of the proposal is to establish a Centre of Excellence in AI, IoT and Robotics to contribute to the development of the society. The following are the specific objectives of this CoE.

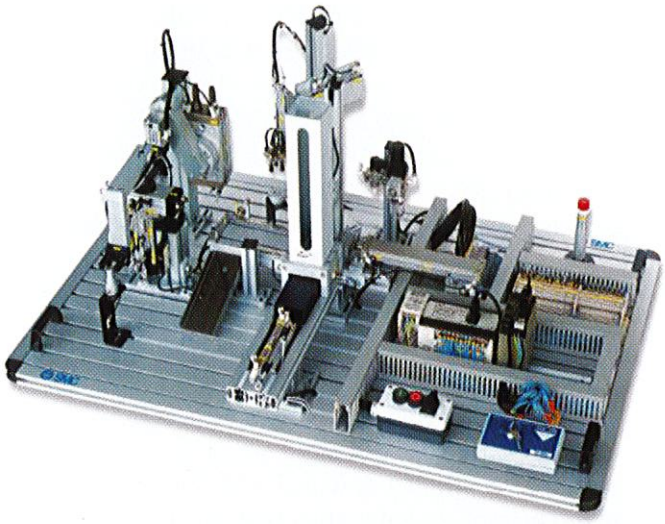
- To implement the state of the art AI and IoT technology to obtain potential benefits to the society
- To act as a centre of hub to facilitate students, faculties, researchers and industrialists to perform practice based learning and implementation of IoT and intelligent techniques
- To develop the skills of faculty members by conducting quality improvement and continuing education programs
- To collaborate with industries for proving platforms for solving and implementing real time industrial problems related to Industry 4.0
- To provide internship programs and other research opportunities to students and research scholars
- To develop technically and commercially viable industrial products and processes

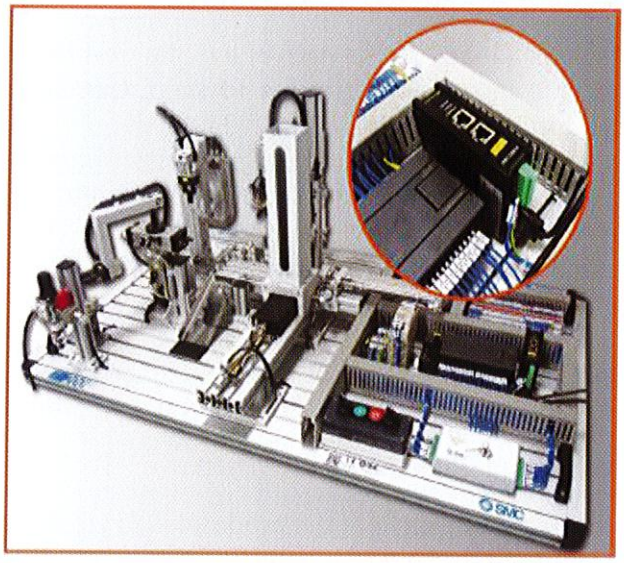
Equipments under procurement process

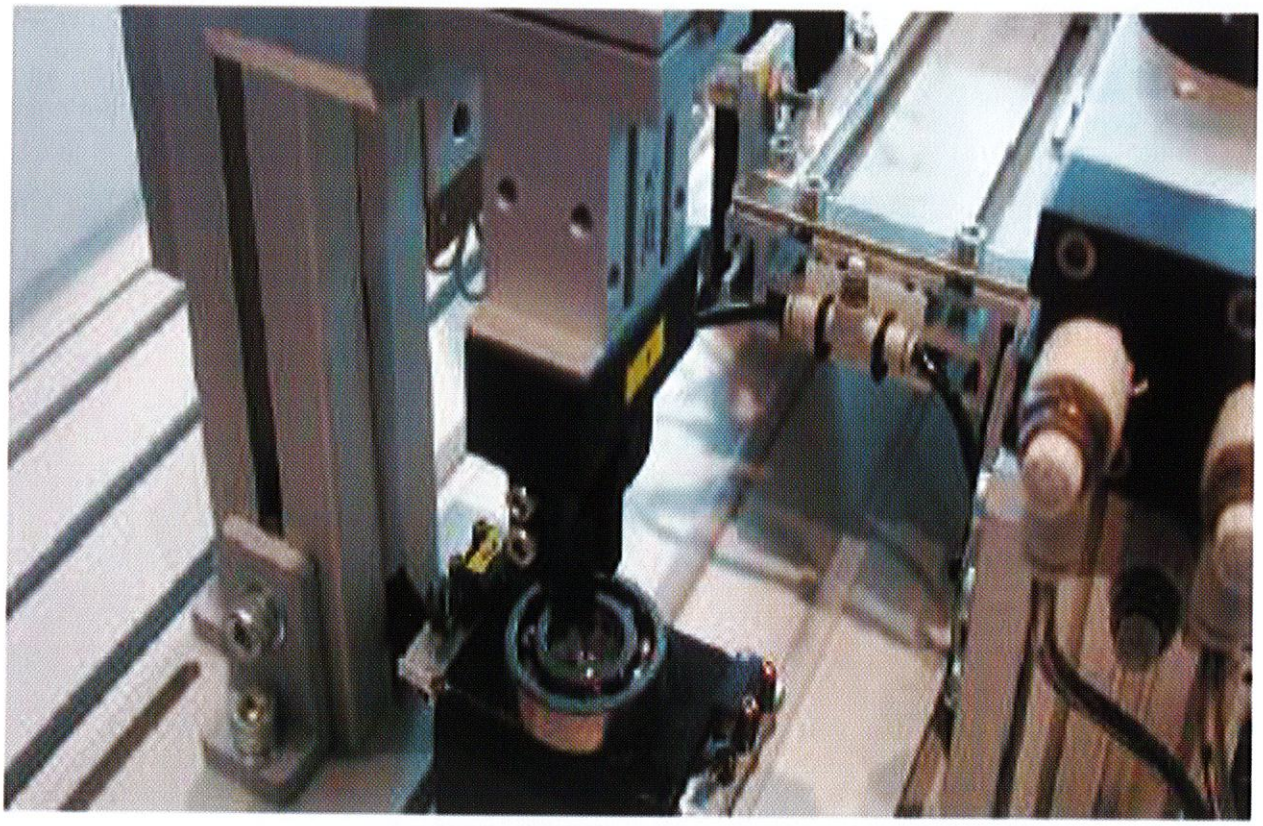
Delta Robot



IoT enabled hydraulic sorting mechanism







IoT enabled industry automation system
(Under discussion with SMC Pneumatics, Noida for MoU)

Centre for Smart Manufacturing

Centre for Smart Manufacturing is an inter-disciplinary research center focused on IT enabled Design and Manufacturing at IIITDM Kancheepuram. This center will develop IT products relevant to Industry 4.0 platform technologies such as Additive Manufacturing, Internet of Things, Augmented Reality and Virtual Reality, Cloud Manufacturing, Digital Thread and Digital Twin. The main objective is to study the interoperability issues in disparate information systems of life cycle, value chain and enterprise domain in an extended manufacturing enterprise. Further, the center aims to bridge the gap between the human and digital world by interfacing human cognitive capabilities into IoT systems. Distributed manufacturing paradigms are vital to decentralize the manufacturing and the main the challenge we address is to evolve novel product architectures catering to need of such smart manufacturing systems. For these objectives, we have teamed up with major universities and leading industries for collaborative development of the technology and transfer to industry in the end.

International Collaborations and MoUs

IIITDM Kancheepuram is actively collaborating with leading universities abroad in order to enhance its research and educational outcomes, as well as improve its visibility abroad and ranking nationally and internationally. The institute has regular student exchange programs with Nagaoka University of Technology (NUT), Japan. One of the visiting final year undergraduate students from NUT will be involved in ongoing project of TLC, in the area of renewable energy studies.

Recently, a visiting master's student from Ritsumeikan University, Japan, has been involved in the design, development and control of the low-cost, three-link articulated robot manipulator discussed earlier. A photograph of the Japanese graduate student working with the TLC staff on the low-cost 3-axis robot manipulator is shown below.

MOU with the University of Genova, Italy: IIITDM Kancheepuram received a research project, titled, Control and operation of agents in a multi-agent fixturing system with swarm control, for 17000 Euro. This project is basically to support a PhD scholar for two years (2017, 2018) under the joint supervision of Dr M Sreekumar (IIITDM) and Prof Matteo Zoppi (University of Genova).

MoUs singed and Active in FY 2018-19

S.No	Partner Industry/Institute	Areas of Cooperation
1	IIT-Madras	Academic
2	Leventm Technologies Private Limited, Bangalore	Semiconductor Chip Design and Artificial Intelligence
3	Invitreo Health Tech. Ventures Private Limited, Bangalore	Healthcare Product Development
4	Omnipresent Robot Tech, Delhi	Robotics, Industrial UAV/Drone and Video Analytics
5	Centre of Excellence-Data Science & Artificial Intelligence, NASSCOM Bangalore	Data Science and Artificial Intelligence
6	University of Catania, Italy	Staff/Student Exchange Program
7	Nagaoka University of Technology, Japan	Staff/Student Exchange Program
8	Nagasaki University, Japan	Staff/Student Exchange Program
9	Saint Gobain Research India	Research Collaboration

07

Student Activities and Achievements

Achievements in Academics

i) List of students who had been nominated for excellence in design, innovation and manufacturing and felicitated on 15 August 2018.

Sl. No	Name of the event / Contest	Name	Roll No
1	Med Tech Hackathon	ISMAIL P	EDS17M009
		AMIYA KUMAR MONDAL	CDS17M003
		PATEL ZEEL BHARATKUMAR	SMT17M010
		SHREESHAIL S TIGADIKAR	SMT17M011
		BALAJI	EDS16M013
2	Industrial Consultancy with Tube Investments (TI) of India Limited	KOTHA RAJ KUMAR REDDY	MFD15I009
		KAKARA VINAY	MDM15B015
3	Defence Expo 2018	KALE AAKASH SUNIL	MFD16I012
		VIVEK YADAV	MSM16B036
		ADITHYAN. T R	MFD16I002
4	US Marines Refine Challenge: GUNG HO	SUBHAJIT SINHA	MFD16I016
		HRISHIKESH HEMANT BORATE	EVD16I006
5	Aditya Birla Groups' Manufacturing today and reinventing the future design contest	K BHAVANA	MFD14I005

ii) Goutam Manoj (MFD14I003) won 4th place (18-25 category) in 'India Design Challenge 2018' conducted by 'AUTODESK' for the design of a "Modern kitchen tabletop".

iii) On 17th February, our team **AgriMax** (Subhajit, Hrishikesh and Aneesh) went to Ventura E-Summit held at **NIT Trichy** to Pitch our product (Smart: Hydroponics) under the CleanTech Sector nominations and won the **Best Start-up Award** and potential funding of Rs 50k to accelerate our work.

iv) IIITDM Team qualified for AUV Singapore challenge, 17/1/19

Placements-2018

The placement activity for the 2019 passing out batch began in the month of September. Since the internship period (May to October) for B.Techs and Dual Degree overlapped with the placement session, only few selected companies were invited before October. Dr.B.Raja, Dr.Prerna Saxena and Mr. MVR Seshagiri were the members of placement team. Later, Mr.G.Ravikumar joined team in the early 2019. The placement was carried out for both IIITDM Kancheepuram and Kurnool

The details are as follows :

Sl No	Name of the Company	COE	EDM	MDM	CSE	ECE	Total placed	Cumulative total placed	Package
		33	34	32	19	17	135		
1	L & T	0	0	4	0	1	5	5	4
2	Saint Gobain	0	1	3	0	0	4	9	7
3	Buddi Health	1	0	0	0	0	1	10	7
4	TVS Motors	0	0	1	0	0	1	11	6.8
5	Coviam	1	0	0	0	0	1	12	7.25
6	Entrayn	0	0	0	1	0	1	13	6
7	Wabco	0	0	0	1	0	1	14	5.55
8	TCS	5	2	0	0	0	7	21	3.5
9	DeltaX	0	0	0	0	0	NIL	21	5
10	Virtusa	2	0	0	1	0	3	24	5
11	Mathworks	0	0	0	0	0	NIL	24	12
12	Codenation	0	0	0	0	0	NIL	24	31
13	PayPal	4	0	0	1	0	5	29	10.5
14	Trimble	0	0	0	0	0	NIL	29	9.5
15	ZOHO	1	0	0	0	0	1	30	4.6
16	NAVIS	0	0	0	1	0	1	31	10
17	GAVS TECH	5	1	0	4	0	10	41	5
18	Startsmarts Labs	1	0	0	0	0	1	42	10
19	LUCID	1	1	0	0	0	2	44	5.5
20	Forbes Marshall	0	0	2	0	1	3	47	6
21	Wipro	1	4	0	0	3	8	55	3.5
22	Krisam Automation	0	0	2	1	0	3	58	4
23	Mbit Wireless	0	1	0	0	0	1	59	5
24	Saint Gobain2	0	2	0	0	0	2	61	4.8
25	Orzota	1	0	0	0	0	1	62	4
26	IBM	4	0	0	1	0	5	67	4.5
27	Daimler	0	0	0	0	0	0	67	4.5
28	Brakes India	0	2	0	0	0	2	69	3.08

29	Evive Software	0	0	0	0	0	NIL	69	6.5
30	Cyber Security	1	0	0	1	0	2	71	4
31	OnePlus	0	0	0	0	0	0	0	3
32	ADP	1					1	72	5
33	Shriram Value	2	4		2	6	14	86	3.5
Sigmoid									
Viasat	2	0	0	2	0	4	92	6	

37

Degree and PG placements

Name of the Company	CDS	EDS	MDS	CED	ESD	EVD	MFD	MPD	SMT	Total	Cumulative total placed	Package
	8	10	15	35	14	18	13	15	9	137		
L & T	1		1							2	2	4.4
Saint Gobain							1			1	3	7
Buddi health				2	1					3	6	7
Coviam				3						3	9	7.25
Entrayn				1						1	10	6
Wabco						1		1		2	12	5.55
TCS		1								2	14	3.5
DeltaX										NIL	14	5
Virtusa											14	5
PayPal				4				1		5	19	10.5
Trimble				3						3	22	10
ZOHO				3						3	25	8
GAVS TECH				5	2					7	32	6
Vignan University	2		3		2	2			1	10	42	
AMD INDIA				1						1	43	
LUCID				2						2	45	5.5
Forbes Marshall							1			1	46	6
Krisam Automation		1	2					1		4	50	4
Brakes India					1	1				2	52	3.08
IBM				1						1	53	4.5
Evive				1						1	54	5
Cyber Security												4
Shriram Value Services				1	1	3				5	59	3.5

Dual

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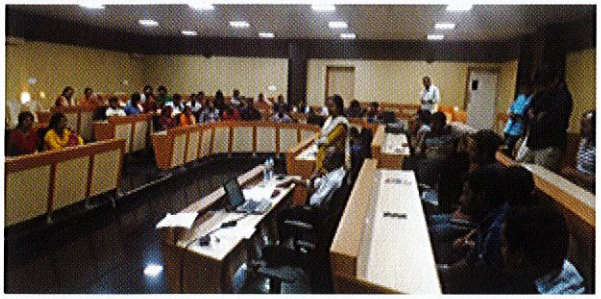
Companies visited during 2018-2019 for campus drive:


virtusa
TaeguTec
WABCO
Mobilizing Vehicle Intelligence
ADP
COVIAM
Brakes India Private Limited
IBM
Viasat
BUDDIHealth
START
SMART
LABS
KRISAM
ntrayn
LUCID
ZOHO
SIGMOID
MBIT
WIRELESS

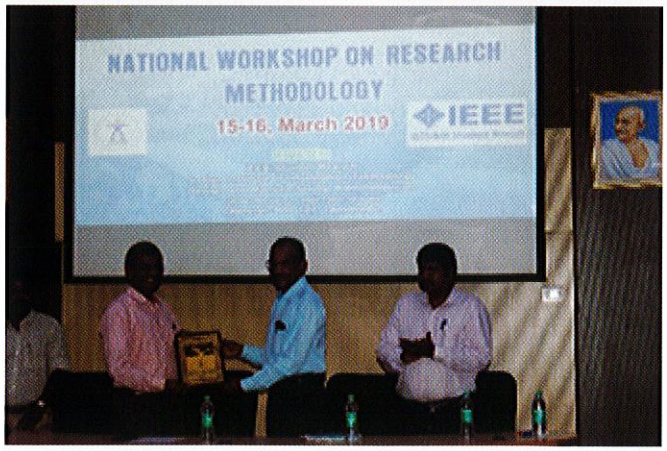
Activities of IEEE Student Chapter

IIITDM Kancheepuram, inaugurated its IEEE Student Branch on 27th October 2016. Since then, the student chapter has been organizing various programs and the details of a few are presented below. During 22/02/2019, Prof.Janaki Raman, retired professor of IIT Madras has given a talk on "Research in Electrical & Electronics Engineering and IEEE Membership" for the Ph.d and M.Tech students and it was organized by IEEE Student branch. About 80 students were benefited.



Guest lecture on "Research in Electrical & Electronics Engineering", 22 Feb. 2019

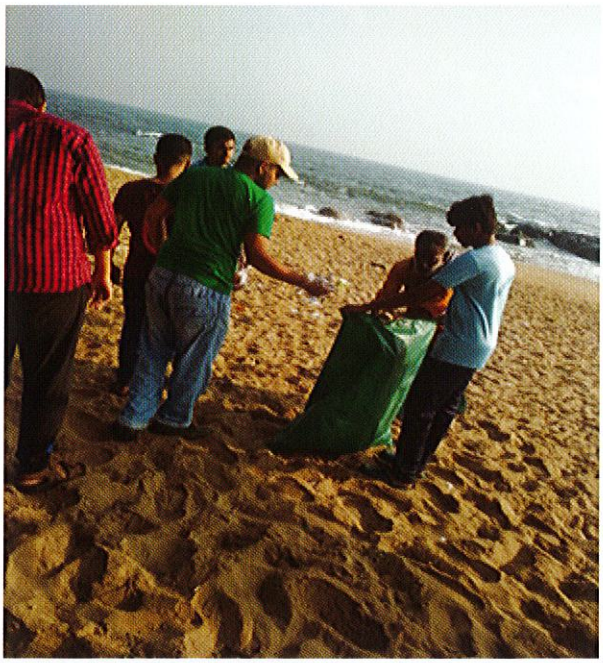
IEEE Student Branch has organized two day "Workshop on Research Methodology" during 15-16 March 2019 and about 60 were registered and participated. Total of 7 speakers have delivered a talk with different methodologies including, Research identification, problem approach, Research progress, Mentor and student relationship, time and stress management, indexing and abstracting, and Technical paper writing etc.,



Two day workshop on Research Methodology, 15-16 March 2019

Activities of Social Service Group (SSG)

The SSG promotes the concept of contributing to the society and the country at large. Social Service Group of IIITDM Kancheepuram, in addition to conventional forms of societal contributions, focuses primarily on training volunteers in novel areas. The SSG emphasizes on inculcating social responsibility towards the environment by conducting garbage cleaning, rain water drain clearing and tree plantation activities within the campus. It also focuses in cultivating a quality of consideration to others in volunteers by conducting training programmes in humanities and sciences for neighboring school students and orphanages, and, to prepare posters on importance of girl child education, hygiene, sanitation, stopping of public evacuation, consequences of drug, alcohol and smoking addiction, etc. Periodic campus cleaning activities were organized with a basic theme of maintaining our surroundings neat and tidy. Tree plantation activity was organized particularly during rainy season to improve the greenery within the campus. Many saplings were planted at selected spots across the campus. Volunteers have also taken the responsibility of watering and maintaining them later on.



Kovalam Beach cleaning activity on Saturday, February 2019, 8.00 AM

Campus cleaning activity

Garbage cleaning within the campus on various occasions
(12th January 2019, 10th & 16th February 2019, 9th March 2019)

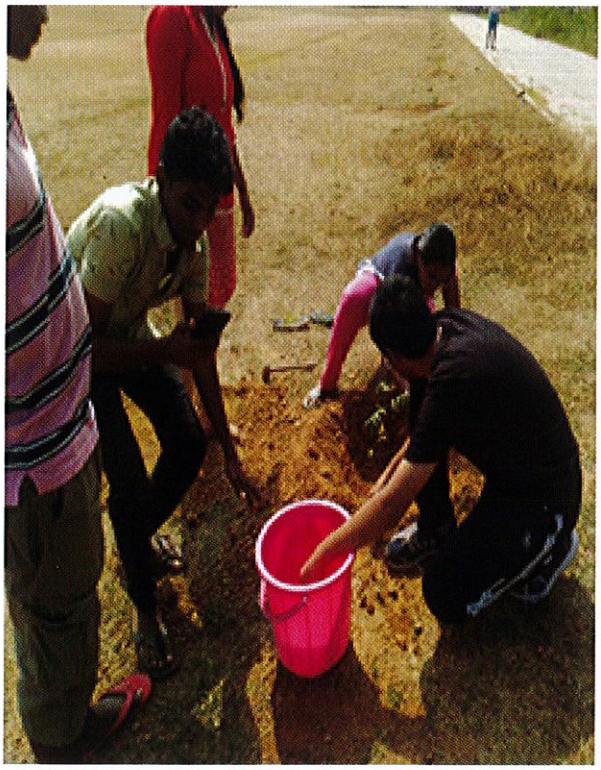
Skit presentation on 25th January 2019

Swachhata survey was conducted around the campus on 29th September 2018.

Blood Donation Camp (27 March 2019)

The team SSG (Social Service Group) of "IIITD Kancheepuram" in association with "Cancer Institute Adyar", conducted a blood donation camp in the campus, on 27th of March, 2019 (Wednesday).

Tree Plantation Drive-Inside Campus



Students Achievements in Sports

3rd Inter IIIT Sports Meet @ IIIT Allahabad (14 – 17 Feb 2019)

The institute regularly participates in the inter IIIT Sports meet conducted on a rotational basis by IIITs. It is pertinent to mention here that the institute hosted the pioneering edition of the meeting in the preceding year and secured first position in boys, girls and overall categories respectively. For the period under report, IIITM Allahabad hosted the meet (3rd Edition) during 14-17 Feb. 2019. Our contingent participated in both indoor and outdoor events (Men and Women categories).

OVERALL MEDAL TALLY

Gold : 22

Silver : 14

Bronze : 13

BEST TEAM AWARD

SQUASH – WOMEN

FOOTBALL – MEN

VOLLEYBALL – MEN

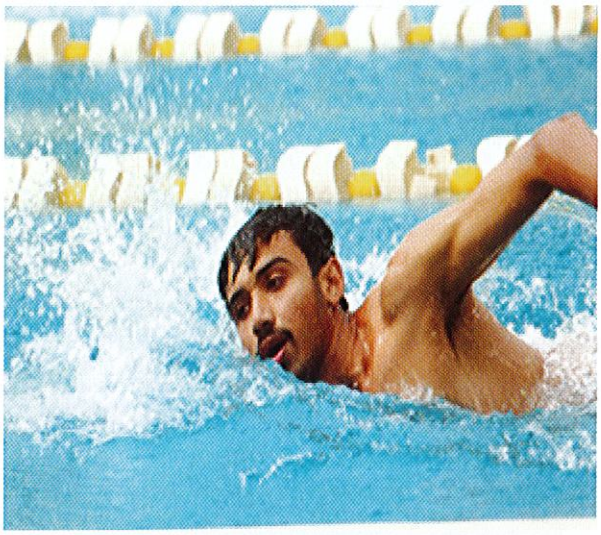
TENNIS – MEN

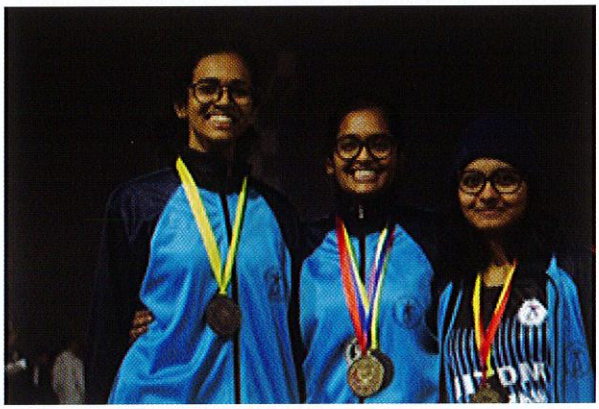
BEST PLAYER AWARD

TEJASVI - BEST ATHLETE FEMALE

NAYAN - BEST POWER LIFTER FEMALE

ASWIN - BEST FOOTBALL PLAYER





7th Place in Kancheepuram Half Marathon – 21 KM (30/09/2018)

10th place in Tagore Engineering College Mini Marathon – 12 KM (31/03/2019)

08

Infrastructure

Infrastructure Development, an Overview

The land allotted in Nov 2010 by the Govt of Tamilnadu, 51.75 acres, has paved way for the infrastructure development at the permanent campus.The construction activities in the permanent campus have seen steady progress commensurate to the budget granted from the time of the institute's inception.A comprehensive masterplan has been developed by experts after a series of brainstorming sessions with the stake holders of the Institute, faculty and students, in 2011.Considering the precious space available for the campus development, a comprehensive and energy efficient masterplan has been developed that can accommodate about 1200 students in Phase I and 5000 students, ultimately. A well thought growth plan was evolved to develop the state of art infrastructure on campus without disturbing the academic and student life. About 6000 sqm was constructed within five months from the land allotment and the institute started functioning from Aug 2011 in its own academic and hostel buildings. The student intake was gradually increased with the completion of necessary infrastructure in successive years and, in the academic year 2015-16, about 300 students were admitted. At present 75% of the development under Phase-I has been completed.

Year	Building Name	Area in Sq Meters
2011-12	PEMS	6300 : Total 6300
2012-13	Boys Hostel 1 Girls Hostel Admin Bldg	2600 2876 4775 : Total = 10251

2014-15	Lecture Hall	10408
2015-16	Boys Hostel 1	18011
2016-17	Dining Hall	3784
	Cafeteria	385
	Sports Complex	2828
	Boys Hostel 2	12802
		15282 :Total 63,500

IIITD&M Institute Timeline – Permanent Campus

Major Infrastructure Facilities

i) Admin Block and Senate Hall

Overall Spec : G+3 Floors with centralized A/C.

Plinth Area : 4775 sq. m

Ground floor : Offices for Dean-Students, Placements, Security, Engineering unit, Store and Purchase, Admin-1, Conference halls (3nos.), Pantry rooms, AHU rooms, Patch room, Main Electrical room and Rest rooms.

First floor : Offices for Academic PG, Academic UG, Dean-Academics, Dean-Admin, Registrar, Audit, Admin-2, Conference hall (1no.), Staff lunch room, Pantry rooms, AHU rooms, Patch room, Electrical room, UPS/Battery room and Rest rooms.

Second floor : Director's cabin, Dy. Director cabin, Industrial research, Conference hall (3nos.), Staff lunch room, Pantry rooms, AHU rooms, Patch room, Electrical room, UPS/Battery room and Rest rooms.

Third floor : Offices for Dean planning, Dean examination, Dean office-1, Dean office-2, AHU room, store, pantry, Rest rooms.

Senate block : 132 seating capacity senate hall, store, Rest rooms, AHU room, security and surveillance room at first floor.

No. of lifts : 2 nos.

Admin block

ii) Academic Block

Overall Spec	:	G+4 Floors
Plinth area	:	10408 sq. m
Ground floor	:	Lecture Halls of 200 seating capacity-1no. (A/C), 100 seating capacity-3nos., 60 seating capacity-1no., Industrial relationship Centre, Main electrical room, AHU room, patch room and Rest rooms.
First floor	:	60 seating capacity -6nos., services same as in ground floor.
Second floor	:	200 seating capacity-1no., 60 seating capacity -6nos., services same as in ground floor.
Third floor	:	60 seating capacity -6nos., services same as in ground floor.
Fourth floor	:	60 seating capacity -1no., Research lab-2 nos., Labs-4 nos. and services same as in ground floor.
No. of lifts	:	6 nos.

Lecture Hall

iii) Laboratory Block

Overall Spec : G+6 Floors

Plinth Area : 36166 sq. m

Basement floor: Substation, Pump room, store room, Fire sump.

Ground floor : No. of labs-7 nos., Library and other services

First floor : No. of labs-8 nos., Seminar halls-2nos., library and other services

Second floor : No. of labs-3 nos., No. of faculty cabins, HOD cabin-., Discussion rooms-2nos., Research scholar workstation., library and other services

iv) Boys Hostel (Block 1)

Overall Spec : G+14 Floors

Plinth area : 18297 sq. m

Ground floor : No. of single room-13nos., No. of double room-7nos., No. of Guest room-2nos., Warden room-1no., Warden office, Office room, Indoor games, Library, Gymnasium, TV room and other services.

First floor & typical : No. of single room-22nos., No. of double room-13nos. and other services.

Total No. of rooms : Single room 346, Double room:189, Common room:15 (Total bed :724)

No. of lifts : 3 nos.

Boys Hostel Block-1

v) Boys Hostel (Block 2;)

Overall Spec	:	G+14 Floors
Plinth Area	:	12,522 sq.m
Ground floor	:	No. of single room-10nos., No. of Guest room-2nos., Warden room-1no., Warden office, Office room, Indoor games, Library, Gymnasium, TV room and other services.
First floor	:	No. of single room-25nos., and other services.
Second floor & typical	:	No. of single room-28nos., and other services.
.Total number of rooms	:	Single room 386, Common room:15 (Total bed :386)
No. of lifts	:	2nos.

Boys Hostel

vi) Dining Block

Overall Spec : G+3 Floors

PLINTH AREA : 3784 sq. m

Ground floor : Dining hall with 206 seating capacity, Kitchen and other services.

First floor & Typical : Dining hall with 206 seating capacity and 100 seating capacity, Terrace Dining area and other services.

No. of lifts : 1

Dining Block

vii) Cafeteria

Overall Spec : Single Storied

Plinth Area : 385 sqm

Ground floor : Dining hall with 206 seating capacity, Kitchen and other services.

Cafeteria

viii) Indoor Sports Complex

Overall Spec : G+1 Floor

Plinth Area : 2828 sq.m

Amenities : Multipurpose hall, Basketball, badminton, weight lifting, squash court, table tennis, Gym, office etc.

Sports Complex

ix) Other Infrastructure Facilities

PEMS HOSTEL : 2800 SQ.M

BANYAN Hostel : 100 BED

LOTUS Hostel : 50 BED

PEMS ACADEMIC COMPLEX : 3600 Sq. m

x) Infrastructure Facilities under Development

FACULTY QUARTERS : SILT+10 FLOOR; 14197 SQ.M

GIRLS HOSTEL (G+14)=13060 SQ.M

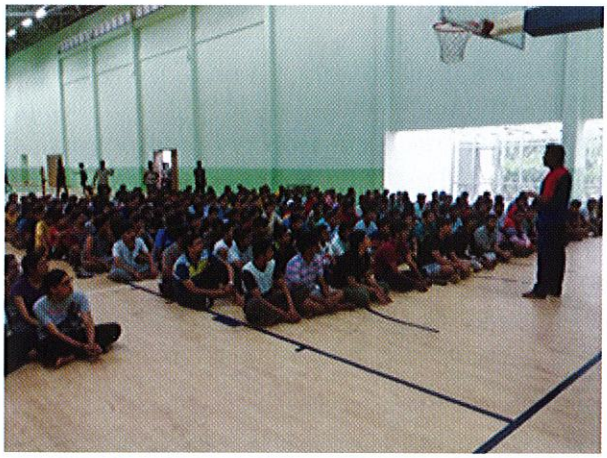
PART OF LABORATORY BUILDING from third floor onwards

09

Events Organized

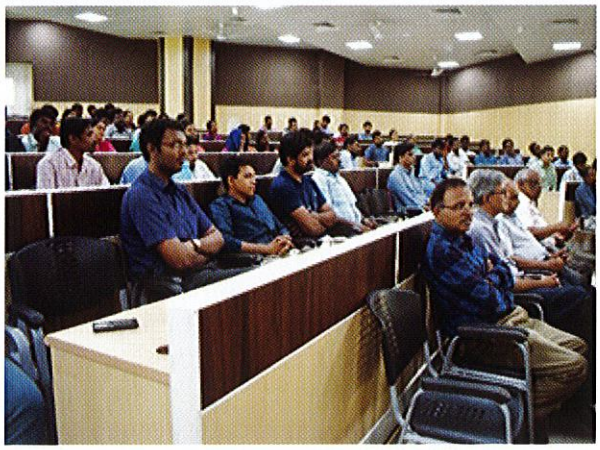
NSO Evaluation (2018-19 Batch of Students)

The institute curriculum mandates the regular engagement of students in either sports or social service related activities during the first year study period. The course is a mandatory one and all students should opt for either NSO (Sports) or SSG (Social Service Group) during the orientation programme. As part of the NSO activities, official training is given in various indoor and sports events for the first year student by the institute physical training instructor with assistance from senior level team captains. This inculcates a good sense of fitness awareness and team bonding amongst the first year students. The training also involves a mandatory Yoga skills training for all and an option sport training chosen by the student such as cricket, table tennis, etc. Based on the skills imparted during the one year period, a final evaluation test with a fitness and skill component is conducted as part of the curricular requirements.



Research Scholars' Day (19 April 2018)

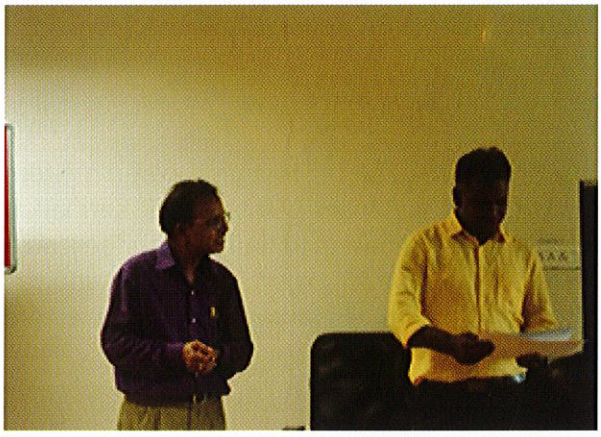
IIITDM celebrated RESEARCH SCHOLARS' DAY on Thursday, April 19, 2018 for the first time in our Institute as proposed by Director Prof. Banshidhar Majhi. The day started with a plenary talk by Prof. S. Karmalkar from IIT Madras who shared many research experiences of his own and others to motivate the research scholars of IIITDM. Posters presented by the scholars were evaluated by an expert committee and the best poster award was given to Mr. D.S.Chandu. Dr. Saurabh Saxena, from IIT Madras delivered a lecture at the valedictory function on "Recent Trends in IC Design and Applications".

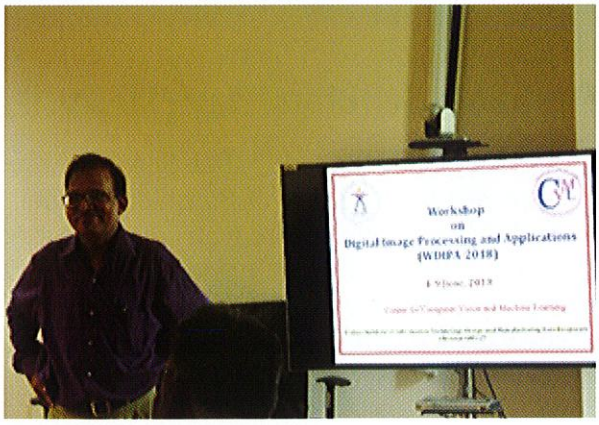


Conferences/Workshops/STTP Organized

Workshop on Digital Image Processing (4-9 June 2018)

Centre for Computer Vision and Machine Learning (CVML), IIITDM Kancheepuram, has organised a six day Workshop on Digital Image Processing and Applications from 4th June, to 9th June, 2018. The workshop focused on the fundamentals of Digital Image Processing, not only Theortical aspects, but also practical sessions has been carred out in MATLAB, and it lends a hand to solve real world problems which involve image or video as input. 25 attendees were shown up, and which included faculties, research scholars, and undergraduates of different colleges from all over India. Topics covered include Image Operations, Image Transform, Image Enhancement, Image Segmentation, Color Image Processing, Object Detection, Image Restoration, Object Tracking, and Biometrics. Session were handled by Prof. Banshidhar Majhi, Dr. Masilamani V, Dr. T.S. Hari Narayanan, Dr. Noor Mahammad SK and Dr. Umarani Jayaraman. Practical Sessions were handled by research scholars.



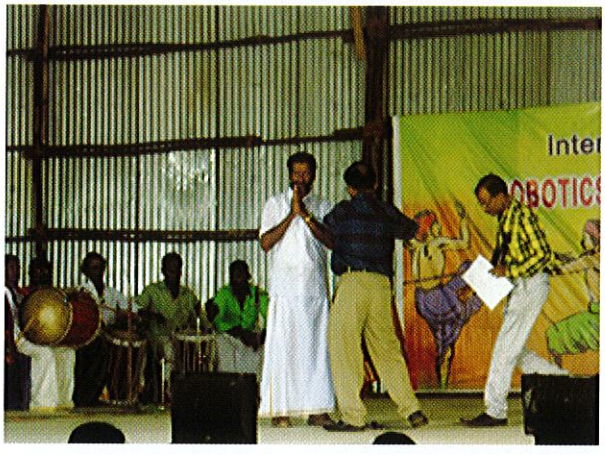


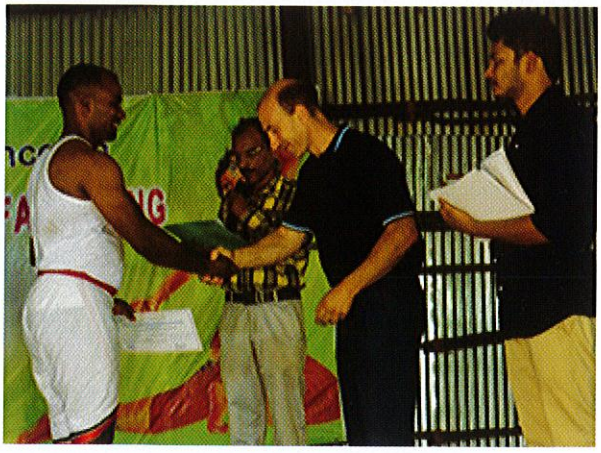
RoSMa2018 (19-21 July 2018)

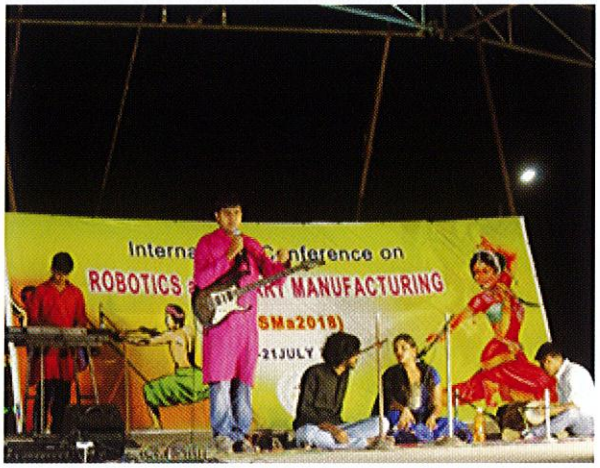
Indian Institute of Information Technology Design and Manufacturing Kancheepuram (IIITDM Kancheepuram) organized a 3-day International Conference on Robotics and Smart Manufacturing (RoSMa) during 19-21 July 2018 which is a forum to discuss about the current issues and trends in the development of robotics, application of smart manufacturing, application of smart materials in robotics and allied areas. RoSMa2018 attracted submissions from Canada, Italy, Kazakhstan, Malaysia, Mexico, New Zealand, Singapore, Taiwan, and the USA, besides India. Out of 225 submissions, 131 were accepted, presented in the conference and published in the Journal of Procedia Computer Science, Elsevier.

An "International Student Robot Competition (ISRC-RoSMa2018)" was also part of the conference which was conducted in parallel with paper presentation. The competition involved testing low cost robots for three-dimensional steering, obstacle avoidance, navigation through conduits, staircase climbing and human detection. This task was decided with the aim of identifying humans trapped under debris during disasters such as earth quake. The juries were from Italy, Singapore and Korea.

Rosma2018 was supported by Indian Space Research Organization (ISRO), Indian National Science Academy (INSA), University of Genova, Italy, EMARO (European Master on Advanced Robotics), IFToMM (International Federation for the Promotion of Mechanism and Machine Science), Association of machines and mechanisms (AMM) and the Robotics Society. This conference was organized under the chairmanship of Dr M Sreekumar, faculty of Mechanical Engineering with the initiatives of the Director, Prof Bashidhar Majhi. Cultural and heritage events such as bharatham, classical vocal, silambam and cendai melam were performed as a part of the conference by the students and professionals. The next edition of the conference will be in 2020.







Other Workshops and STTPs

A five-day workshop on "High Performance VLSI Architectures for Digital Signal Processing" was conducted by Dr. Noor Mahammad Sk during April 30-May 4, 2018.

A five-day workshop on "Research Challenges and Opportunities in Network System Design" was conducted by Dr. Noor Mahammad Sk during May 7-11, 2018.

A five-day workshop on "High Performance Packet Processing Algorithms and Architectures" was conducted by Dr. Noor Mahammad Sk during May 14-18, 2018.

A five-day workshop on Data Analytics and Machine Learning (DaMl 2018) was conducted by Dr. Sivaselvan and Dr. Sadagopan during June 18-22, 2018 at our institute. About 75 participants, including 15 internal participants, attended the program and benefited. Besides institute speakers, several external speakers delivered lectures in the workshop that inluded Mr. Sudarsun, CEO, Buddihealth, Prof R.S. Milton, SSN College of Engineering, Prof S. Mathew from IIT Madras.

Self-sponsored Short-Term Training Programme (STTP) on "Industrial Automation and Control" from 5th July to 7th July 2018 was conducted by Department of Electronics and Communication Engineering, IIITDM Kancheepuram. More than 40 participants attended from all over the country. The STTP is co-ordinated by Dr. Vijayakumar K.

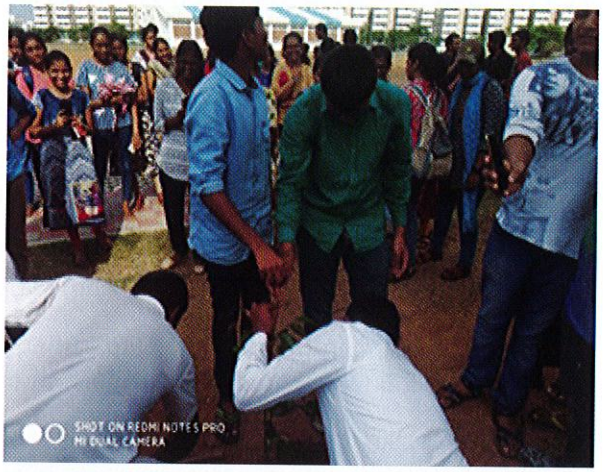
Self-sponsored Workshop on "Technical Writing and Publishing with Advanced Computer Tools" was conducted from 8-9 September 2018 More than 100 participants attended from all over the country. The STTP is co-ordinated by Dr. Vijayakumar K, Dr. K P Pradhan and Dr. Munesh Singh.

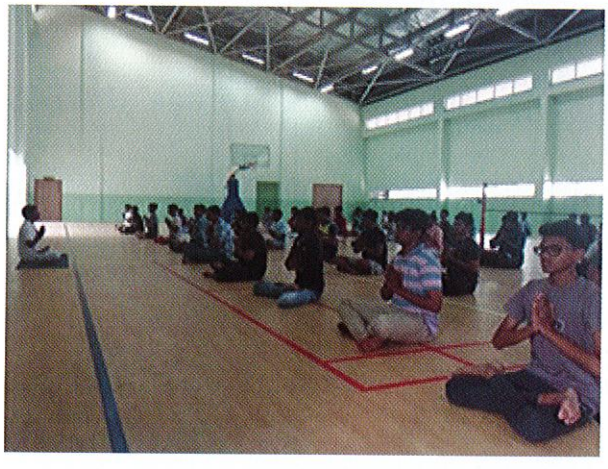
Self-sponsored Workshop on "Improve Research Discoveries and Identifying Paper Publication Opportunities" was held on 05/10/2018. More than 40 participants attended from all over the country. The STTP is co-ordinated by Dr. Vijayakumar K, Dr. K P Pradhan and Dr. Munesh Singh.

One day workshop on Technology-driven Innovation & Entrepreneurship by Prof Dr Krish Sankaran on 27th March 2019 at 9:30 AM. Title: Technology-driven Innovation & Entrepreneurship

Orientation Program (23 July2018)

For students who had taken admission in the UG/DD programs, one week orientation program was conducted. The program started on July 23, 2018 with the inaugural speech of Dr. SV Mani, proprietor, PI Water and BCS technology, and Director IITDM Kancheepuram. Yoga session, self defence skills session, First Aid session, Meeting with HoDs and Deans, Invited talks on Design Thinking, Human values, Teacher Learning Process, etc. were conducted from July 24 -31, 2018.





Guest Lectures Organized

Prof. Atul Sharma from IIT Bombay delivered a guest lecture on April 5, 2018 on "CFD - A more physical approach" on invitation by Dr. S. Jayavel

Mr. K. R. A. Nair, Former Executive Director, Development, LUCAS TVS, delivered a guest lecture on "Electric Vehicle Eco system - Opportunities for Innovation" on April 11, 2018, on invitation by Dr. K. Selvajyothi

Captain S. K. Thakur delivered a talk on "Funding opportunities in DRDO" on May 11, 2018 on invitation by Dr. S. R. Pandian

Prof. D. Sriram Kumar from NIT Tirchy delivered a lecture on "Li - Fi and its Applications - A Survey" on May 16, 2018 on invitation by Dr. K. Selvajyothi

Prof. Kannan Moudgalya, TLC Coordinator and Coordinator of Spoken Tutorials Project at IIT Bombay, delivered a lecture on "The Spoken Tutorials software modules and open source software" on May 18, 2018 on invitation by Dr. S. R. Pandian

Prof. Kamakoti from IIIT Madras delivered a talk on "Information Security" on May 22, 2018 on invitation by Dr. V. Masilamani

Dr. Swaraj Paul from Visva-Bharati University, Santiniketan, West Bengal, delivered a lecture on "Solutions of Singular Integral Equations Based on Multi-resolution Analysis" on May 31, 2018 on invitation by Dr. Tapas Sil

Representative from "Data Foundry" delivered a talk on "Machine Learning Applications in Industry" on 29-Aug-2018 on invitation by Dr. V. Masilamani

Dr. Vijay Anand, Director (Engg.), Aricent delivered a talk on "Internet of Things for Connected Vehicles" on 19th September 2018 on invitation by Dr. M D Selvaraj

Dr. Ashish Ghosh, Professor and Head of the Machine Intelligence Unit, Indian Statistical Institute, Kolkata gave lecture on Machine Learning and the Applications on 22/02/2019

Dr. Sushmita Ghosh (De), Professor, Dept. of Computer Engg, Jadavpur University delivered a lecture onSoft Computing Techniques and the Applications on 23/02/2019

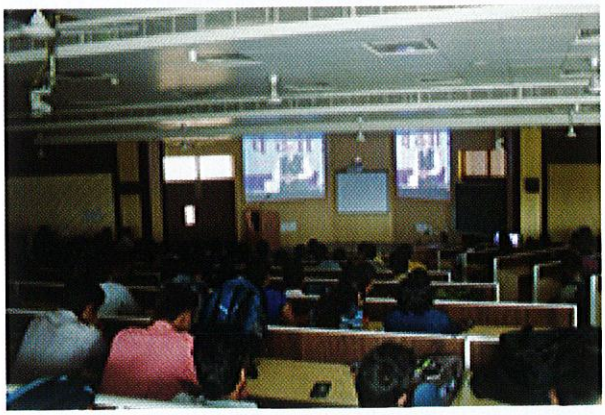
Prof. Indranil Sen Gupta from the Department of Computer Science and Engineering, IIT Kharagpur delivered a talk on "Recent trends and Technologies" on 29/03/19

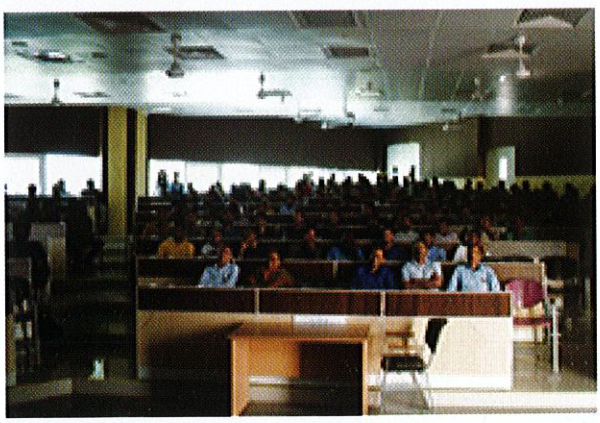
Dr. Dmitry N Makshimov, Kiransky Institute of Physics, Russia delivered a lectur on "GoosHanchen and ImbertFederov shifts of Laguerre Gaussian beams reflected from dielectric interfaces" on 3/1/2019.

Conclave (28 & 29 Dec. 2018)

Conclave On "Materials & Technologies in Energy Conversion & Storage" (MTECS 2018) - E-vehicle

The conclave was inagurated by Padma Shri. Prof.G.Sundararajan, ARCI and Joint Professor – IIT Madras along with the guest of Honor Dr.S.Mohan – Chief Scientist, CECRI-Chennai. The conclave featured the recent trends and innovation related to Energy Conversion and Storage, Electric Vehicle, Plug-in Charging Stations, Battery Management, Thermal Management, Future Strategies, Sustainability. Prominent speakers from academia and industries, startups delivered talks. The organizers Dr. K. Selvajyothi, Dr.B. Raja and Dr. K.P. Pradhan have organised for stalls and expo sessions. Scholars from various institute are invited to display research work in poster mode.





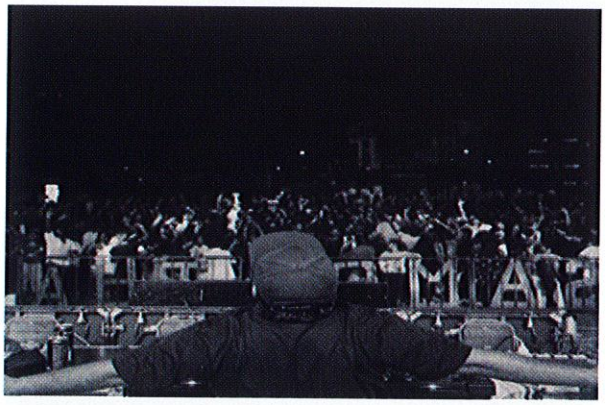
Live Telecast by Honorable PM on Pariksha Pe Charcha 2.0 (29 Jan 2019)

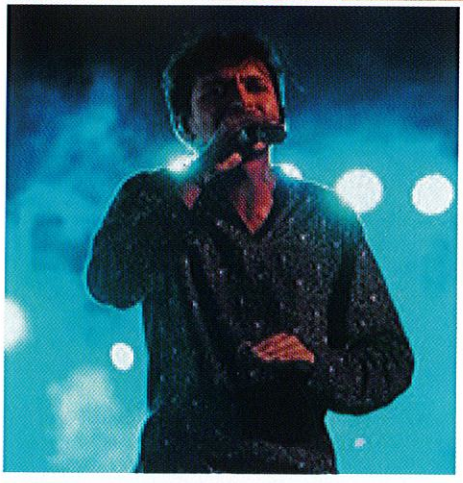
Candle Light March (20 February 2019)

A candle light march was organized on Wednesday, (Feb. 20, 2019) in the memory of our brave soldiers who sacrificed their lives in Pulwama terror attack and to express our solidarity. The march was started at 5.30 pm from Aswatha hostel and reached the Govt. Higher secondary school, Kandigai and returned back to the Institute after lighting the candles with the school students.

Samgatha (1-3 March 2019)

Spread over three days, Samgatha, meaning "Confluence", is the annual inter-college festival of IIITDM. For the first time, it was a culturals only festival, after it being split into Technical (Vasisht) and Culturals (Samgatha). Following tradition, the various clubs of our institute (Art, Music, Dance, Lit and Drama) conducted a variety of entertaining and exciting events that garnered huge participation from students all around. In 2019, Samgatha played host to a variety of pro-shows like EDM night, Rock Night and Comedy Night and the visiting performers and artists were met with huge rounds of applause and cheers.





IIIT Sports Meet Felicitation Function (4th March 2019)

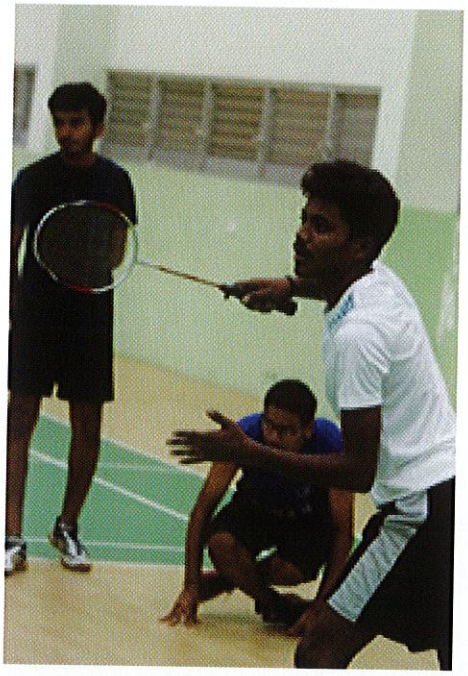
Inter Department Tournament (September 2018)

Over all Championship:

1stPlace : ECE

2ndPlace : ME

3rdPlace : CSE



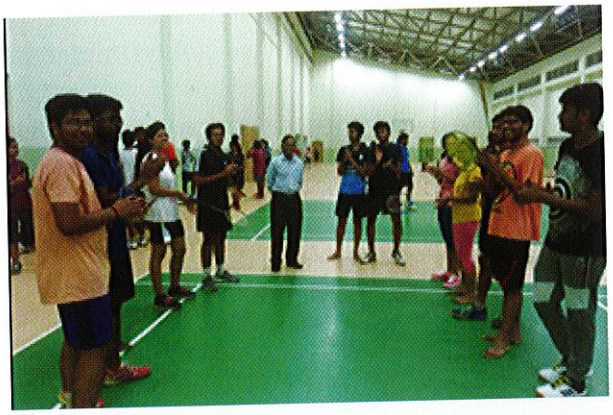
Inter House Tournament (March 2019)

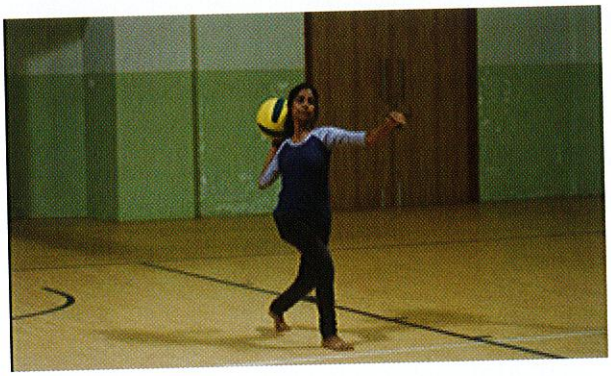
Over all Championship:

1st – Nilgiri – 62 Points

2nd – Udaigiri – 60 Points

3rd – Shivalik – 59 Points





10

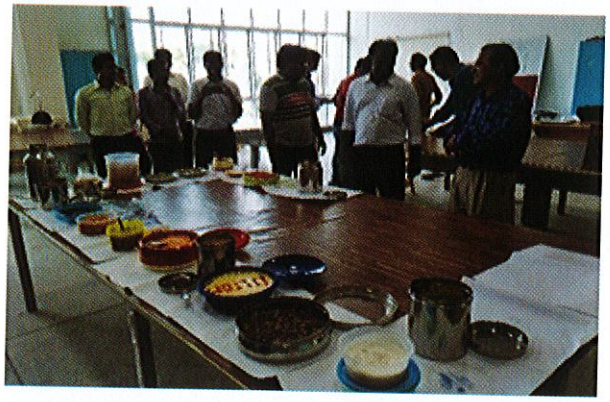
Calendar Events-Institute Celebrations

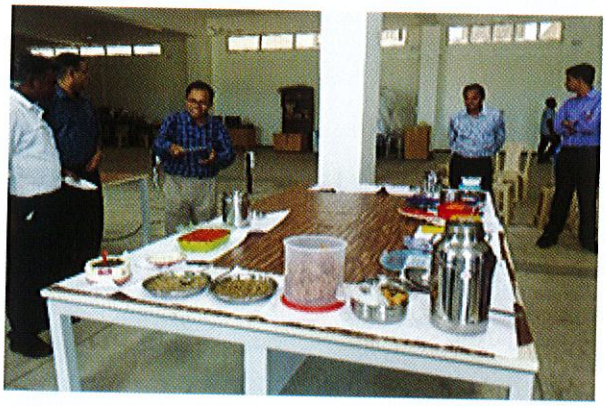
Ek Bharat Shrestha Bharat (10 April 2018)

As part of Ek Bharat Shrestha Bharat, the institute conducted a pencil drawing contest on Tuesday, April 10, 2018. All the winners who have participated in various Ek Bharat Shrestha Bharat events were given prizes on May 1, 2018.

Ethnic Food Day (31 May 2018)

As a part of Ethnic Food Day, faculties and staff members brought one home-prepared vegetarian food (sweets and snacks) on May 31, 2018 and shared them with others. The event was held at the institute workshop hall. The faculty, staff and scholars tasted a variety of home food and had lighter moments amidst their busy schedule.





International Day of Yoga (21 June 2018)

International Day of Yoga was celebrated by faculty, staff and students of IIITDM Kancheepuram on June 21, 2018. The Protocol video distributed by the Ministry of AYUSH was played for the benefit of the institute fraternity at the venue. Director Prof. Banshidhar Majhi delivered the inaugural address mentioning the importance of Asanas and fitness which are vital to lead a better and healthy life. The session was coordinated by Mr. A. Selvam, Research Scholar from Tamil Nadu Physical Education and Sports University and institute Physical Training Instructor. They demonstrated various Asanas ranging from Padmasana, Vajrasana, Bhujangasana, sarvangasana, etc. A Handbook of Basic Asanas, was released by the Director and circulated amongst the institute fraternity. Protocol video and the Ministry of Ayush and the in-house prepared Handbook of Asanas were circula with the institute fraternity for their sustained practice and benefit.

booklet circulated by
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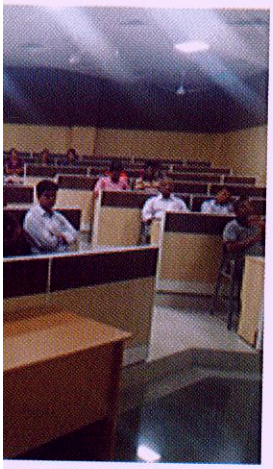
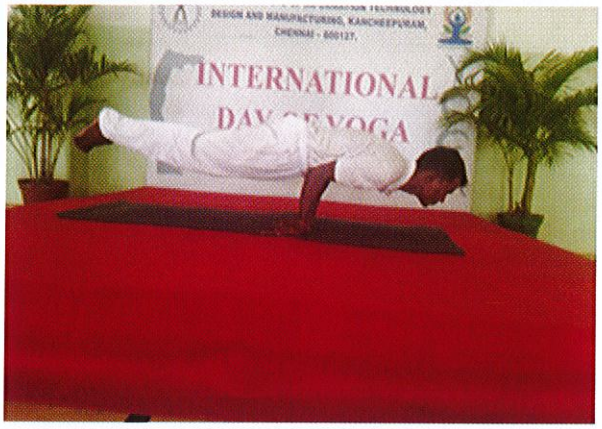




Independence Day (15 Aug. 2018)

72nd Independence day of the nation was celebrated with great enthusiasm and spirit on August 15. 2018. Prof. Banshidhar Majhi, Director IIITDM Kancheepuram, hoisted the flag and it was followed by the national anthem. Students displayed their talent and showcased their patriotic spirit through different dance, singing and varieties of other performances highlighting diverse culture of India signifying the unity in Diversity. A student APP was also launched on the Day by the Director. The meritorious students and winners of the design competitions, were also felicitated by the Institute. A record crowd comprising of Faculty, staff, students and people from neighborhood turned up for witnessing the national flag hoisting and surging the patriotic fervor and spreading the feeling of being triumphed.

Teachers' Day (05 Sept. 2018)

In the memory of great teacher and former president of India, late Dr. S. Radhakrishanan , Institute celebrated the Teachers day on September 05, 2018. Prof. Banshidhar Majhi distributed the prizes to the winners of various sports competitions. Students also conducted a quiz competition for the faculty. It was a joyous events with an active interaction among student and faculty and enjoyed by all.

Hindi Pakawara (15-29 Sept. 2018)

Hindi Pakhawara was celebrated from September 15 to September 29, 2018 and many events and competitions were conducted during the period for the Faculty and Staff. There was tremendous response from the faculty/staff and students who participated in the various competitions for Poetry recitation, Story Telling, Hindi Quiz, Essay competition, Drama etc. under different categories. All programs/events were complete success with many non-Hindi speaking faculty/staff and students expressing desire for learning Hindi. Winners of the competitions were declared and prize shall be distributed.

SPIC Macay (06 Sept 2018)

Institute is having active local chapter of SPIC MACAY which is the Nodal center for all the colleges nearby. This year the institute witnessed four sessions of SPIC MACAY in the institute. The orientation program of SPIC MACAY was conducted on 06th Sept 2018,Mr. ChinmayaArjun Raja, Volunteer and State Coordinator for SPIC MACAY Tamilnadu was with us on this occasion. This event was coordinated by K Bharati.

Gandhi Jayanti

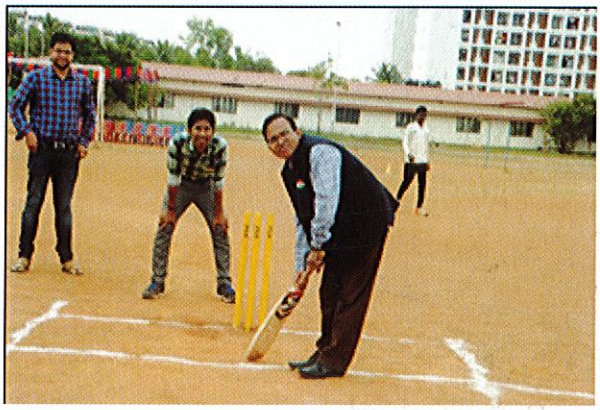
IIITDM celebrated Gandhi Jayanti in collaboration with SPIC MACAY on 27th Sept 2018. Our special guest Dr V R Devika for hand weaving session was with us. This event was coordinated by K Bharati. Students also enacted a Hindi drama on the Gandhi ji's teaching which was widely appreciated by all.

Dandiya Night (18 Oct. 2018)

As a celebration for all dance lovers out there, a "Dandiya night" was organised this year. Colourful lights and decorations attracted students, who joined in large numbers to showcase their dancing skills and have a good time. The night witnessed some graceful dance moves, dainty duets and much more as students swayed to the enticing music.

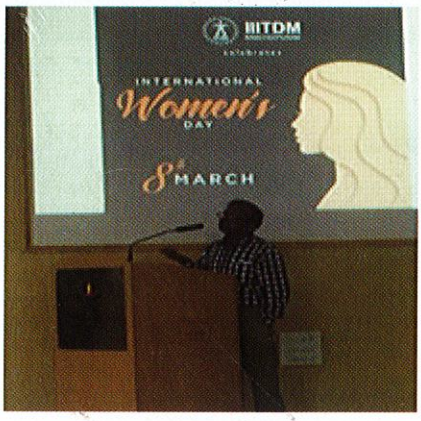
Republic Day (26 January 2019)

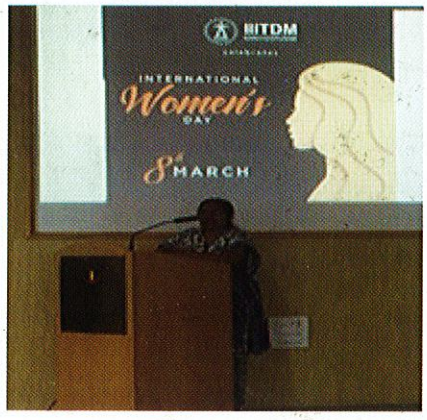
IIITDM celebrated 70th Republic day of our nation on Saturday, January 26th 2019. The program commenced with flag hoisting by the Director, Prof Banshidhar Majhi, followed by students displaying their national spirit through various art forms. Students made the function colorful through music, songs, dances, band performances and speeches. As a part of celebration, the faculty and students played a friendly cricket match.

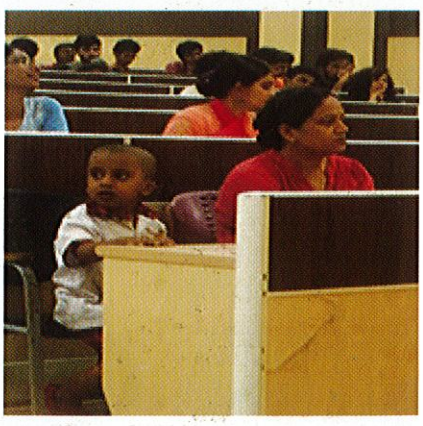


Womens'Day Celebration (8 March 2019)

Director inaugurated the event with a speech and talked about his inspiration and motivation which made him to be a better person.Dr. Binsu J Kailiath shared her journey in life, about the challenges of being a teacher, a mother, a wife, a sister, a daughter and above all, a woman. She ended her speech with a short note to all girls and women, to stay strong and to always balance family and work . "family should always be the first priority" she said, "for everyone , men or women , girls or boys" . Dr. Priyanka Kokil, Professor In Charge of cultural, appreciated the efforts put in by the culturals team for organising the event. Students also shared their thoughts in three different languages, namely, English, Tamil and Malayalam.







Holi (21 March 2019)

Colours, laughter, fun and frolic marked the Holi celebrations at IIITDM this year. Students gathered around Banyan to play with colours and water, and enjoy a traditional Holi celebration at our institute. In an initiative to save the environment, all product used were environment-friendly and non-toxic, thereby making it an event to cherish and remember.