INDIAN INSTITUTE OF INFORMATION TECHNOLOGY
SRI CITY, CHITTOOR
(An Institute of National Importance under an Act of Parliament)

Annual Report 2020-21

IIIT Sri City Chittoor

Annual Report 2020-21

(1st April, 2020 to 31st March, 2021)

Contents

1. Director's Report

Our journey began with the able mentorship of IIIT Hyderabad along with IIT Hyderabad. We continue to follow the best practices of these institutes in all our academic and research programmes through structured collaborations.

Our new campus hosts the best in class infrastructure to support high-quality learning. Each floor of the building has designated spaces including state of the art air-conditioned classrooms, labs and faculty cabins and student activity centers. Currently we have two-blocks of hostels and a large dining facility. The construction of two more hostel blocks combined with a dining hall is in progress. Besides, we have rented apartments for PhD and PG students in the Sri City township. Our industry partner Sri City Pvt Ltd enables access to Sri City, a largest integrated industrial township with leading 200 MNCs from 30 countries. Enabled by our industry partners, IIIT Sri City has been in regular touch with these companies to carry out collaborative projects with our students visiting these companies regularly and also taking up internship opportunities.

We strongly believe in the philosophy that good faculties can guide the students' learning and shape the student's career. Hence, we have carefully planned and recruited our faculty members who are alumni of globally known institutions. All of our faculties have PhDs from IITs/IISc or top universities worldwide. Notably, all are young and dynamic faculties with extensive research and industry experience. The faculties are quite active in their research; and importantly are able to translate their knowledge and experience into academic learning for our students.

Our BTech program has dedicated themes and tracks of courses offered to both ECE and CSE students, which are optimized regularly; based on constant feedback received from the industry. Further, since 2019, we have BTech programs with specializations in AI & Machine Learning, Cyber Security and Cyber Physical Systems. Many of the courses under these specializations are taught by industry experts; including workshops. In order to promote

UG-Research, we have a merit-based BTech Honours program wherein the students can work on a particular area under a faculty or group of faculties for a period of 2 years. They earn their Honours degrees by producing research publications or Intellectual property or a software/hardware product.

The Board appreciated the achievements of the institute in the first five years and placed on record the contributions of Prof. U. B. Desai (Director of IIT Hyderabad), Mentor Director for his leadership, Industry Partners–represented by Sri C.Srinivasa Raju, Chairman, Sricity Foundation for leading development of state-of the art infrastructure and Director & faculty of IIIT Hyderabad for leading the academic and research activities.

Our achievements in campus placements, internships, sponsored projects and industry engagements are a testament of the same. Our first three batches of students have launched their careers in multinational IT companies, successful emerging technological startups, and core ECE companies. Microsoft, Amazon, TCS, IBM, Deloitte, Swiggy, Grofers are some of the multinational companies where our students are currently placed. The number of companies that have visited our campus has been steadily increasing, which reflects the quality of our students

and of the education and orientation they have received at the institute. To increase the visibility of our students to high quality jobs in the country (and abroad) we have facilitated in the curriculum for students to enroll in summer and semester-long internships (during the end of the pre-final year and end of the final year respectively).

To guide each and every student through the challenges that placements present, a set of 10 to 15 students are associated with a faculty program under the IMPACT program, where faculty document the plan, targets, and achievements of their students and guide them through the land of opportunities and pitfalls. In particular, the students are unaware of so much information, which can potentially increase student chances to achieve their dream offers; the IMPACT programme presents an opportunity for students to fill that information gap with meetings with faculty and their peer groups.

Within a short period of 7 years, the Institute has established 2 research centers - Centre for Smart Cities (CSC) and MHRD initiated Design and Innovation Center (DIC). These centers focus on different themes such as Computer Vision, Data Analytics, IoT, Machine Learning, Solar Energy, Smart Transportation, etc. The institute has several research groups and importantly, have got several sponsored projects worth 4+ crores from both Govt. funding agencies such as ISRO, DRDO, Department of Science and technology (DST) and industries such as Analog Devices, NVidia, Hella Automotive, etc. Significantly, IIIT Sri City is the first IIIT in PPP mode to start a fully funded MS/PhD program in July 2016. The institute currently has 30+ full-time PhD students and Research Fellows working on different sponsored projects.

We have established Gyan Circle Ventures, a Technology Business Incubator (TBI) funded by MeitY (Under TIDE 2 Scheme) to incubate and fund deep-tech Startups. We are part of MHRD supported Institute Innovation Cell which encourages creativity and innovation among students. E-Cell of IIIT Sri City furthers the efforts of inculcating entrepreneurship mindset through workshops, lectures and camps.

Apart from technology and academics, we believe that in the long-run, an individual's success is decided not only by the technical skills but also by his/her social behaviour, soft skills and aptitude. We have more than 12 clubs comprising both technical, cultural and social activities. In IIIT Sri City, each student is encouraged to be a member of at least three clubs, one from each category.

Our societal engagements are noteworthy. We have adopted five nearby villages under Unnat Bharat Abhiyan. Our students are actively engaged in various activities in these villages with focus on children, educated youth, women and elderly people.

IIIT Sri City is strategically located in the midst of industries yet offering a green environment; and in close proximity to Chennai and Tirupati. IIIT Sri City has a serene and calming environment yet offers a strong social infrastructure. This ensures that the Institute is well-connected to the IT industries and Start-up ecosystem in Chennai, the electronics start-up ecosystem in Tirupati and other well-known academic institutions for collaboration.

I am confident we would attain greater heights with the passing years due to the depth and richness of our education programs, the strength of our research projects, the dedication of our

faculty, the devotion of our professional staff, and the accomplishments of our students. All these, point towards an exciting and promising journey at IIIT Sri City.

On behalf of IIIT Sri City fraternity, I wish to thank the members of the Board of Governors, Ministry of Education, Government of Andhra Pradesh and Industry Partners for their continued guidance and supporting the development of the campus.

Prof.G.Kannabiran
Director

2. IIITS as Institute

2.1 About Institute

Indian Institute of Information Technology Sri City, Chittoor known as IIIT Sri City was established in 2013 by Ministry of Education, Government of India as an Institute of National importance by an Act of Parliament with a view to develop new knowledge in Information Technology and to provide manpower of global standards for the Information Technology industry and to provide for certain other matters connected with such institutions or incidental thereto. The partners are Government of India, Government of Andhra Pradesh and Sricity Foundation. The Institute was established in the year 2013 under this scheme in partnership between the Government of India (50% contribution), the Government of Andhra Pradesh (35% partnership) and the Sricity Foundation (15%) partnership.

In the year 2011, the Government of India, Ministry of Human Resource Development, had announced the scheme to set up 20 new Indian Institute of Information Technology (IIITs) under the Public-Private Partnership (PPP) model. The scheme envisages establishment of autonomous, not for profit, self-sustaining, research-led educational institutes which will contribute significantly to the global competitiveness in the key sectors of Indian economy and industry. These institutes are expected to focus on applied research and education in applied IT in selected domain areas. IIIT Sri City Chittoor was registered as a society with the registrar of societies on September 2, 2013 under Societies Registration Act. Subsequently, it was declared as Institute of National Importance by an Act of Parliament vide Gazette of India dated 9th August 2017.

2.2 Mission, Vision and Objectives

2.2.1. Mission

The mission of IIIT is to achieve high standards of excellence in generating and propagating knowledge in information technology and other allied engineering disciplines.

2.2.2 Vision

Nationally Relevant and Internationally Recognized Entrepreneurial Institution

2.2.3 Objectives

- To Emerge as one amongst the foremost Institutions in information Technology and allied fields of Knowledge
- To advance new knowledge and innovation in information technology and allied fields to empower the nation to the forefront in the global context;
- To develop competent and capable youth imbued with the spirit of innovation and entrepreneurship with social and environmental orientation to meet the knowledge needs of the country and provide global leadership in information technology and allied fields;
- To promote and provide transparency of highest order in matter of admission, appointment to various positions, academic evaluation, administration and finance.

2.3 Governance

2.3.1 Board of Governors (BoG)

Shri Amit Khare, IAS
Govt of India Secretary, Department of Higher Education, Ministry of Education
(from 14-12-2019 onwards till 25-08-2020)

Shri Amit Khare is the Secretary, Higher Education in the Ministry of Human Resource Development. He is an Indian Administrative Service officer of 1985 batch from Jharkhand cadre. He is a graduate from St. Stephens College and Post Graduate from IIM, Ahmedabad. He has held various important assignments in both, Central & State Government. He was Collector/Dy. Commissioner of 4 districts. He has long years of experience in Finance as also in the field of Education. He was Secretary, Board of Revenue, Bihar, Commissioner of Commercial Taxes of Jharkhand, and Principal Secretary, Finance & Planning Department, Jharkhand. He has also served as Principal Secretary to Governor, Jharkhand and also Vice Chancellor of Ranchi University. Mr Khare served the Central Government as Joint Secretary, Higher Education looking after Education Policy, International Cooperation & Copyrights. He also served as Member Secretary of National Pharmaceutical Pricing Authority of India.

Shri M Balasubramaniam
Board Director & Technology Leader
Founder & CEO, STRATINFINITY INC
Chairman, IIIT Sri City, Chittoor w.e.f. 26th August, 2020

Shri Bala is a seasoned technology leader with a great track record of Building Organizational capability and creating value through technology enabled business transformation with proven Expertise & Leadership in devising and effectuating policies aimed at building and managing multinational Captive's - Global Capability Centers in Banking, Financial Services, Insurance, Software Development, Telecom, Higher Education functions and successfully managed multiple Merger & Acquisitions and Joint ventures globally in the field of technology centers of BFSI and Higher Education functions.

He is having two decades of experience in the IT industry and worked with multiple MNC including Citibank, Polaris, Dun & Bradstreet USA, TransUnion USA. Bala was a founder Director of Higher One India NYSE listed Financial service company and Founder Managing Director of Blackboard Inc USA, a world's largest education technology company serving 120 million students covering 20000+ Universities across 90 countries in the world, Managing the R&D Center in India responsible for Product development using exponential technology. Bala has closely interacted with the Higher Education Students, Faculty members and Directors of Universities and Colleges globally, establishing the student's success by providing Software application for assessments of students and faculty members. He is a successful transformational leader in building technology and product engineering centers in India to the global organizations.

Shri Bala was instrumental in building the CIBIL (Indian Credit Bureau) and the Credit Bureau of Sri Lanka, Egypt, UAE- Dubai and Nigeria. He was instrumental in building the captive company's ecosystem (MNC companies) in the State of Tamil Nadu.

Presently Bala is Founder & CEO, STRATINFINITY, a global consulting firm head quartered in USA and having its offices in London UK, Chennai India. Bala is also a General Partner & Chief Digital Officer, PONTAQ UK. Bala is a Board Advisor to some of the IT/ITES/ Startup companies including Change Pond Technologies, Edsix Brain Lab, Thinkinfinity Inc, Ubiquity Inc. to name a few.

Apart from the professional accomplishments above, Bala was instrumental in the Technology Initiatives of Govt of Tamilnadu and building the Tech Captive Global company eco system in the State of Tamilnadu. Shri Bala played key role in various technology Initiatives of Tamil Nadu Police department. Bala works closely with Ministry of Education & MeitY, Government of India on multiple assignments on honorary and advisory roles including the following:

- Chairman of NASSCOM GCC council & Member of GCC National Council between 2017-2019.
- Bala served as Vice Chairman of NASSCOM GCC council for TN and Kerala between 2015-2017.
- Member CYCORD - Ministry of Home, Govt of India.
- Member Board of Studies, Ramanujam Institute of Mathematics, University of Madras.
- Board Director, Center for Innovation and Entrepreneurship Development (CIEDI) by MeITY, Govt of India.
- Bala was a Senate member at Madurai Kamarajar University., appointed by His Excellency Governor of Tamilnadu.
- National Board of Advisor, MSME & Startup Forum - Bharat.
- National Cyber Security and HR committee member of AMCHAM (2015-2020).
- Committee Member, HR, Education & Skills Development, CII – TN Region (2016-2019)
- Part of NETF initial discussion forum held June 2021.

Apart from his Graduation and Post-Graduation in Management from Madras University, he has also an alumnus from IIM-Kolkata, PG in AI/ML from University of Texas and Executive Program in Global Mergers &. Acquisitions from Imperial College of London. His areas of interest include all cutting-edge technologies including Artificial Intelligence, Machine Learning, Block Chain and Data Analytics and passionate towards building the Industry-Academia collaboration that paves way for Outcome Based Education

Areas of Interest: AI/ML, Cyber Security, Digital Twin, Quantum computing, Data Governance, Digital Privacy, XaaS (Everything as a Service) & IoB (Internet of Behaviors).

Areas of Focus: Startup- Industry - Academia collaboration; New Captive Centers (R&D GCC's) in India, OBE across the Higher education in India, Upskilling & Reskilling among the students for industry readiness, India to be the world's digital society.

Members:

Shri Rakesh Ranjan
Additional Secretary (Technical Education)
Department of Higher Education, MHRD
New Delhi

He is a Mechanical engineering graduate from IIT Kanpur, He joined the Indian Administrative Service (IAS) in 1992. During the last over 25 years, He served for over 14 years in some of the most difficult regions of India (states of Tripura, Jharkhand and Manipur), and 5 (five) ministries/ departments of the Government of India- Defence, External Affairs, Culture, Higher Education and Pharmaceuticals.

Shri J.Syamala Rao, IAS
Secretary to Government
Higher Education Department
Government of Andhra Pradesh

Shri J. Syamala Rao is the Secretary to Govt. of Andhra Pradesh, Higher Education Department/ Principal Secretary (HE), Govt. of Andhra Pradesh. He is an Indian Administrative Service officer of 1997 batch cadre.

Shri Srinivasa C. Raju
Chairman, Sricity Foundation

Shri Chintalapati Srinivasa Raju is the Chairman of Sri City, which is the largest Integrated Business city in South India.

Shri Chintalapati Srinivasa Raju, widely known as Srini Raju, is an Indian Entrepreneur, and Private Equity Investor. Srini Raju was the Founding CEO & MD of Dun & Bradstreet Satyam Software, the in-house technology unit of Dun & Bradstreet, established in 1994, which focused on implementing large-scale IT projects for Dun & Bradstreet businesses. DBSS was later renamed as Cognizant.

Srini later became the Co-founder and Chairman of Peepul Capital (successor to iLabs Venture Capital Fund), a Private Equity (PE) firm based out of Hyderabad and Chennai. Besides funding and mentoring next generation entrepreneurs, he plays an active role in building educational institutions of higher learning.

Srini has an MS in Civil & Environmental Engineering from Utah State University, USA and a BS in Civil Engineering with Honors from REC (NIT), Kurukshetra.

Srini is passionate about Education and Skills Development. He is a Founding-Member & Member of Governing Council of International Institute of Information Technology (IIIT), Hyderabad; Industry Partner (Donor) & Member of Board of Governors of Indian Institute of Information Technology, Sri City; Executive Board Member of Indian School of Business (ISB) and Benefactor of SriniRaju Center for Networked Economy (SRITNE); Co-Sponsor (Donor) and Board Member of KREA University; and Founding-Member & Board Member of T-Hub, Hyderabad.

Shri Ravindra Sannareddy
Managing Director, Sri City (P) Ltd

Shri Ravindra Sannareddy is the Managing Director of Sri City, which is the largest Integrated Business City in South India. He has been involved in creating and sustaining high-tech ventures for close to two decades. Today, Ravi is an established industry-captain with diverse interests in Infrastructure Development and other allied businesses.
Shri Ravi also personifies the success story of a young first generation entrepreneur who has his roots in rural background and who has grown his personal stature and his businesses to immense international scale and size in a short span of time.

As a “son of the soil”, he decided to give back to the society and uplift the economically backward region where he was born. He amalgamated his extensive experience gained by living and doing business abroad with his strong roots in the local communities in creating Sri City, a striking example of new urbanism in

India. He has been successfully leading his team to accomplish his mission to make Sri City, as the destination for the best companies of the world.

He holds an M.S.E Degree in Environmental Engineering from the Johns Hopkins University, Baltimore, Maryland, USA and an M.S. Degree in Water Resources Management from Utah State University, Logan, Utah, USA and a B.S. Degree in Civil Engineering from National Institute of Technology (formerly REC), Tiruchirapalli, Tamil Nadu, India. He is a Member of Board of Governors of Indian Institute of Information Technology, Sri City.

Shri. Srinivas Peddada
Senior Advisor
General Atlantic, Hyderabad

Srinivas Peddada is a Senior Advisor at General Atlantic, drawing on more than 25 years of experience in IT applications and infrastructure to provide strategic support and advice to the firm's investment teams and portfolio companies in the Technology sector in India & Southeast Asia. Before joining General Atlantic in 2020, Srinivas was holding the following positions.

- Chief Information Officer-Bharat Financial Inclusion Ltd 2012 –2020:
- Chief Information Officer-D&B South Asia, Middle East & North Africa Group 2007 - 2012
- Chief Technology Officer, AIG (2006 – 2007)
- Chief Technology Officer, GE Finance India Region and GE global support team (2005-2006)-Managing Technology Strategy and Operations
- Chief Architect, IBM: 1995 - 2005
- Senior Systems Analyst, TCS (1992-1995)

Ms. Shalini Kapoor
IBM Fellow
Chief Technology Officer (IBM AI Applications)
Bengaluru

Shalini Kapoor drives research, strategy, and development to maximize the infusion of AI. She is leading IBM's AI market-leading capabilities, driving consistent, re-usable implementation patterns, business transformation and value, and making AI accessible and useable to business users, and not just data scientists. She leads innovative and engaging programs to enhance AI skills and adoption within Cognitive Applications and across the India Software Labs. She is an innovator and technology Strategist with 23 years of work experience. Her expertise lies in developing product strategy to drive business imperatives, leading software product development and building high performing global teams. She is a powerful blend of technology vision and business acumen with proven architectural skills in complex solution development across industries. She is widely known for incubating and innovating next-gen solutions based on clients' requirements.

Shri. Bhuvan Anandakrishnan
Director & Centre Head
Caterpillar Technology Centre-India, Chennai

Bhuvan Anandakrishnan is the Director of Electrical, Electronics & Software Technology, within Caterpillar India. Bhuvan acquired his bachelor's degree in Electronic Engineering from Madras University and a Master's degree in Business Administration from Great Lakes Institute of Management. He also has a Management Diploma from Bradley University, USA. Bhuvan has 21+ years of Industry experience of in the areas of Embedded Firmware Development, Machine & Engine Control Systems, HMI, Telematics, Autonomy & Automation, Cloud Technologies, Edge Computing & Advanced Analytics. He has Served in a variety of engineering, strategy development and leadership positions within Caterpillar Inc and has been a Key member in establishing its Electronics & Software Development Competency in India. He is also Providing Industry leadership as Chairman for NASSCOM GCC council in TN and Kerala region.

Prof. P. J. Narayanan
Director
International Institute of Information Technology, Hyderabad

P J Narayanan is the Director of IIIT, Hyderabad and a researcher in the areas of 3D vision, computational cameras, and parallel computing. He built the Virtualized Reality system in mid 1990s at the Carnegie Mellon University to capture 3D geometry and appearance of dynamic events. He also was an early adopter of GPUs for several Computer Vision and general computing tasks. He got his Bachelors (1984) from IIT Kharagpur, Masters and PhD (1992) from the University of Maryland, all in Computer Science. He was a research faculty member at the Robotics Institute of CMU from 1992 to 1996 and headed the Vision and Virtual Reality groups of the Centre for Artificial Intelligence and Robotics, Bangalore from 1996 to 2000. He has been with IIIT Hyderabad from 2000 and has been its PG Coordinator, Dean of Research, and, from 2013, the Director. He was the President of ACM India from 2009 to 2014 and has involved with various activities of ACM such as Awards, Technology Policy, etc.

Prof. Partha P. Chakrabarti
Professor of CSE & Former Director
Indian Institute of Technology Kharagpur
Kharagpur

Partha Pratim Chakrabarti completed his B.Tech in 1985 and PhD in 1988 from the Dept of Computer Science & Engg, Indian Institute of Technology (IIT) Kharagpur. He joined the same department as a faculty member in 1988 and is currently a senior Professor. From July 2013 he was the Director of the IIT Kharagpur till June 30, 2019. He was the Professor-in-Charge of the state of the art VLSI Design Laboratory which he helped set up and has been the Dean of Sponsored Research and Industrial Consultancy at IIT Kharagpur and Head of the Advanced Technology Development Centre. He was also the co-Director of the strategic General Motors-IIT Kharagpur Collaborative Research Laboratory on Electronics, Controls and Software. He held additional charge as Director IIT Patna and IIIT Kalyani. He has worked closely with Industry and Government and has successfully completed projects totaling worth more than several hundred crores with MHRD, DST, CSIR NMITLI, MeiTy, DHI, INSA, Volkswagen

Foundation, Intel, Synopsys, Google. National Semiconductors, General Motors to name a few. He is the architect and overall coordinator of National Initiatives like the National Digital Library of India (https://ndl.iitkgp.ac.in), Global Initiative for Academic networks or GIAN (www.gian.iitkgp.ac.in), SPARC (sparc.iitkgpac.in), IMPRINT, etc that are emerging as game changers in India's higher education scenario.

Prof. K.N. Satyanarayana
Director
Indian Institute of Technology
Tirupati, Andhra Pradesh

Dr. Kalidindi N. Satyanarayana is currently the Director of IIT Tirupati, Andhra Pradesh. He has been a Professor in the Building Technology & Construction Management Division of the Department of Civil Engineering at the Indian Institute of Technology Madras, Chennai, India.
He received his B. Tech degree in Civil Engineering from IIT Madras. He then received MS and PhD degrees with specialization in Construction Engineering and Management from Clemson University, USA. He has been a faculty member at IIT Madras since 1991. In 2009 he was a Visiting Professor at lowa State University, USA. At IIT Madras he served as Advisor - Alumni Affairs (2004-2009) and Chairman - Engineering Unit (2010-2013). He is currently Chairman of the Implementation Committee for IIT Madras Research Park - Phase II (one million sq. ft. facility). He has served on the committees for setting up new campuses including IIM Trichy, IIT Indore and IIT Jodhpur. He is Chairman of the Academic Advisory Group, Project Management Institute (PMI); Vice Chairman, Board of Advisors of The Glass Academy; Expert Member on the Board of Management of Building Materials & Promotion Council (BMTPC), and serves as Independent Director on five company boards.

Prof. G. Kannabiran
Director, IIIT Sri City Chittoor

Dr. Ganesan Kannabiran Professor (HAG) of Management Dr. Ganesan Kannabiran is a senior Professor of Management at the National Institute of Technology, Tiruchirappalli with over 25 years of experience. He has served as Head of the Department for several years and Dean of Research & Consultancy at the institute level. He also served as the Director i/c of the institute for a brief period from June- November 2016.

He is a recipient of Commonwealth Professional Fellowship (Edinburgh Napier University, UK-2015), Two Fulbright Fellowships (Education Administrators Programme-2011, Fulbright Visiting Lecturer at Oklahoma State University-2015), and British Council Study Fellowship (Huddersfield University UK-1997). He served as the National Expert for an international research study supported by Asian Productivity Organization on Measuring Productivity in Higher Education.

As the Founder Director of Center for Entrepreneurship Development and Incubation (Section 8 Company promoted by NITT), he obtained a major grant of INR 15.5 M from Ministry of Information Technology, Government of India for creating an incubation facility and to support innovative business ventures through seed funding. He has led the institute to win "High Impact Entrepreneurship Campus Award 2015" jointly conferred by Government of India. He led the efforts to secure corporate funding of INR 1.2 Crores from Sonata Software Ltd for supporting the innovation and entrepreneurship development efforts.

Prof.G.Kannabiran
Director & Registrar Incharge
(Additional charge as Registrar Incharge from 27th August, 2019 onwards)

2.3.2 Finance Committee

Chairman	Shri Amit Khare Secretary Department of Higher Education, MHRD, GoI (from 14-12-2019) Shri M.Balasubramaniam Chairman, IIIT Sri City Chittoor w.e.f. 26th August, 2020
Members	Shri Anil Kumar, Director (Finance), IFD Section Department of Higher Education (TS-1) Ministry of Education
	Sri J Syamala Rao, IAS Secretary to Government, Higher Education Department, Government of Andhra Pradesh
	Shri Srinivasa C. Raju Chairman Sricity Foundation
	Prof. G.Kannabiran Director IIIT Sri City Chittoor

2.3.3. Building and Works Committee

Chairman	Prof. G. Kannabiran Director IIIT Sri City, Chittoor
Members	Prof. Abhijit Ganguli - Member Associate Professor & HoD Department of Civil Engineering,IIT Tirupati (Nominee of Ministry of Education, GoI)
	State Government Representative – Member to be nominated

Shri Srinivas Tallapragada Independent Projects & Facilities Consultant (Nominee of Industry Partner)
Prof. A. Mehar Prasad Professor Structural Engineering Division, IIT Madras
Prof. Minakshi Jain Director School of Planning and Architecture, Vijayawada
Dr. Rajendra Prasath Associate Professor & Faculty In-charge for Academic Programs IIIT Sri City Chittoor
Dr. Hrishikesh Venkataraman Associate Professor & Faculty In-charge for Research & Development IIIT Sri City Chittoor
Registrar Incharge Secretary IIIT Sri City, Chittoor

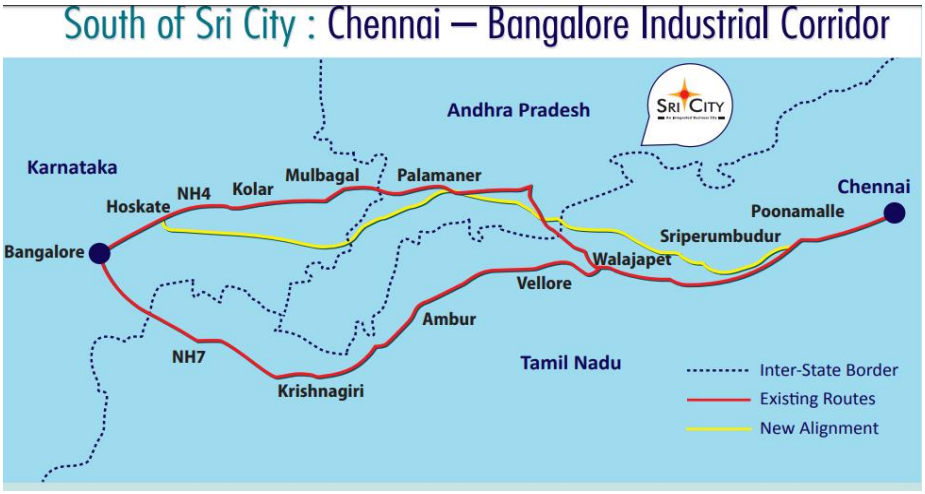
2.3.4 Senate

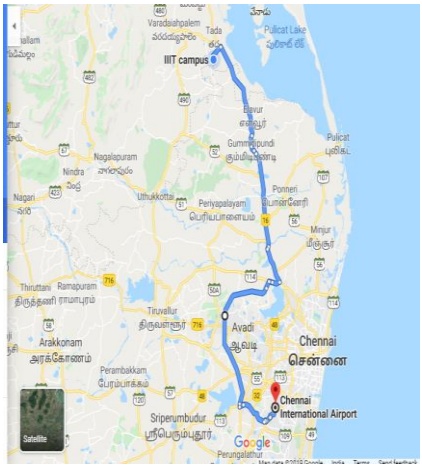
Chairperson Ex-Officio	**Prof.G.Kannabiran** Director, IIIT Sri City Chittoor
	Prof.Rajendra Prasath Associate Professor and Faculty Incharge for Academic Programs
	Prof.Hrishikesh Venkataraman Associate Professor and Faculty Incharge for Research & Development
	Prof. Balaji Raman Associate Professor & Faculty In-charge for Industry Engagement (Chairman, Campus Placements) and International Relations
	Prof.C.V.Jawahar Professor & Dean (R&D), IIIT Hyderabad

Three persons from amongst Educationists of repute And not employees of the Institute	**Prof.Devendra Jalihal** Professor (Electrical & Electronics) IIT Madras
	Prof.M.Balakrishnan Professor, Computer Science & Engg and Deputy Director, Strategy & Planning, IIT Delhi
	Prof.S.Sudarshan Subrao M Nilekani Chair Professor Computer Science & Engg, IIT Bombay
Three persons who are not Members of teaching staff Co-opted by the Senate for their Specialized knowledge	**Prof.Gargi B Dasgupta** Director, IBM Research India and CTO, IBM India Bengaluru
	Shri Kannan Babu Ramia Principal Engineer, Intel India, Bengaluru
	Shri Srikumar Sreedharan Product Head, TCS, Chennai
Ex-Officio Secretary	Registrar Incharge

2.4 Campus and location

The Campus spreads across 81 acres and is equipped with state-of-the-art Infrastructure in Sri City. Located 55 km north of Chennai on the Nellore Highway, Sri City boasts of seamless connectivity by road, air etc. (Visit: http://www.sricity.in). IIIT Sri City is located in Sri City, a decade old state of the art industrial city spread over 8000 acres encompassing a multi-product Special Economic Zone (SEZ), Domestic Tariff Zone (DTZ), Free Trade & Warehousing Zone (FTWZ) and Electronics Manufacturing Cluster. Sri City is hosting over 180 companies from 28 countries. The institute has access to the industries and social infrastructure available in Sri City through the Industry Partner.





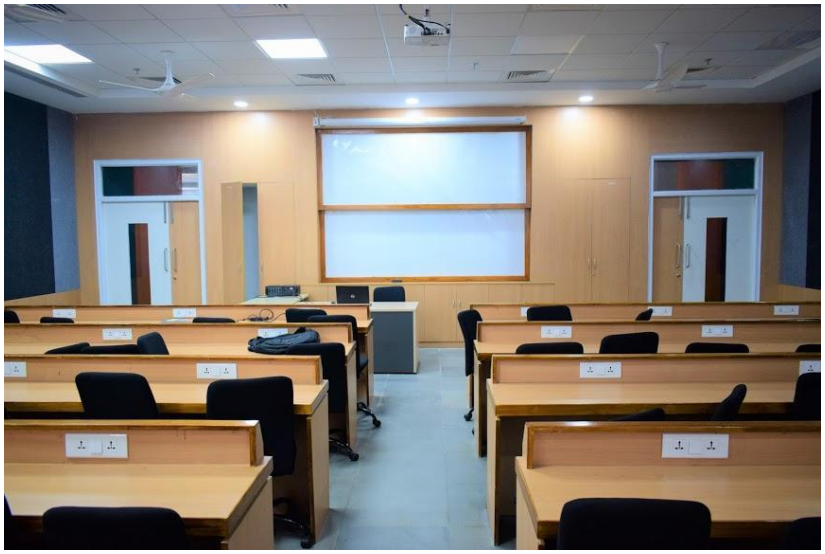
2.5 Infrastructure

Classroom

The Institute started functioning from its own premises from the academic year 2018-19.

Academic Block

Academic Block



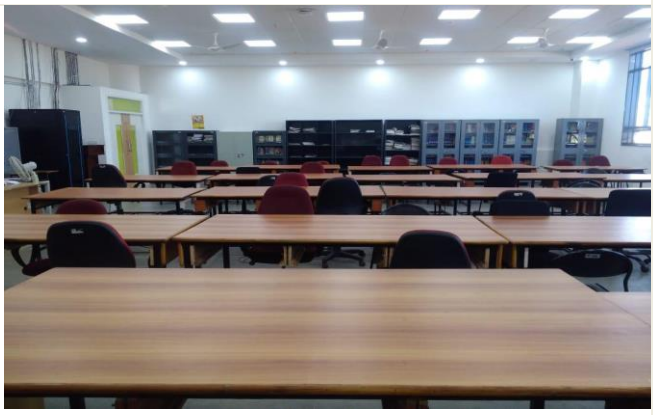
Class Room with 60 seating Capacity

Class Room with 120 seating Capacity

Library

Major events in the academic year 2020-21, for the IIIT Sri City library. As shown in the photographs below, the total area of the Library is 1905 sqft with a seating capacity of up to 50. There are 23 racks with a total capacity of 3012 books including CSE, ECE, Mathematics and Humanities. This number may vary based on the book size.

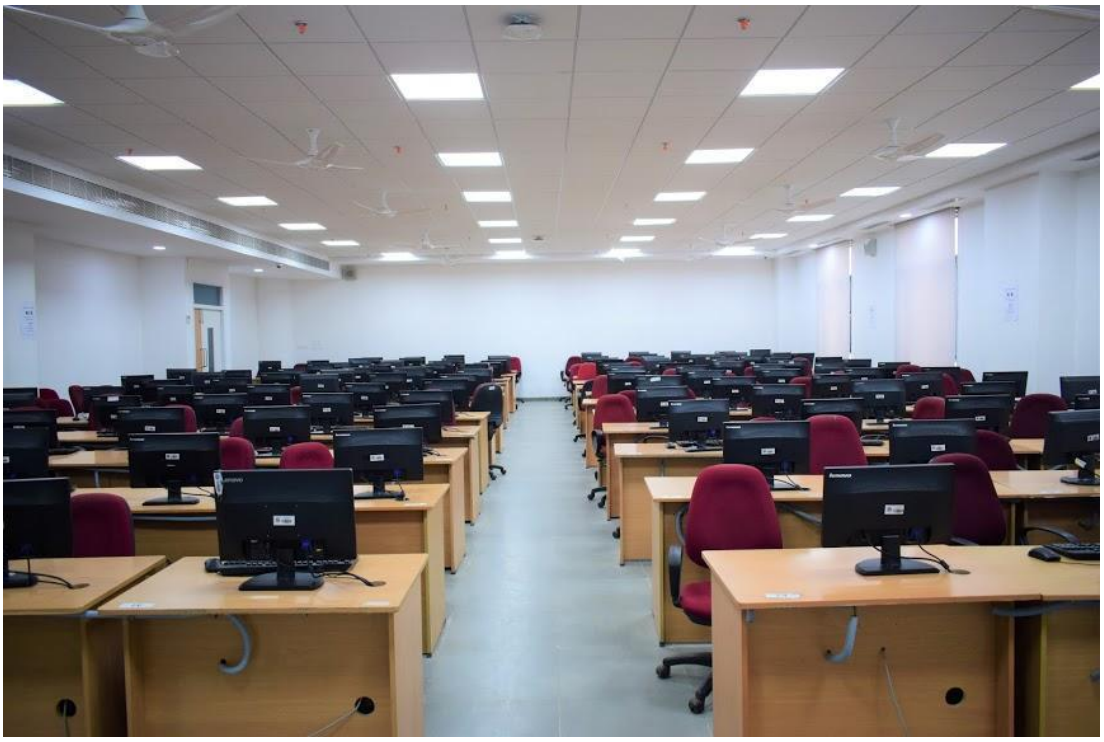


A number of textbooks, reference and research related books were purchased as shown in table below: Details of expenditure on academic books at IIIT Sri City during 2020-21

S.No.	Department	No. of books	Cost Rs.
1	ECE	10	46,356
2	Mathematics	1	10,744
3	CSE	26	23,563

Labs



Computer Labs with 125 seating capacity

Electronic Labs with 100 seating capacity

Hostels

Hostels and Dining Hall Facility

Dining Hall

Sports Facilities

3. Admissions

3.1 UG Admissions Policy:

IIIT Sri City offers Undergraduate Programs focused on Information Technology

- B. Tech in Computer Science and Engineering (CSE)
- B. Tech in Electronics and Communication Engineering (ECE)

Admission under JoSAA/CSAB:

IIIT Sri City adheres to Central Educational Institution Reservation as per Admission Act. Admission is based on the joint entrance examination (JEE Main). Notification of JEE Main is announced in dailies across India during September – December and is conducted in the month of May every year in various centers across India. Admissions are open to all classes, religions, races and genders including transgender. B.Tech admissions into CSE and ECE programs are done through JoSAA/CSAB.

Based on the merit ranking in JEE Mains, the Joint Seat Allocation Authority (JoSAA) or the Central Seat Allocation Board (CSAB) invites candidates for an online counseling session to choose the institute of their choice. JoSAA or CSAB announces the seat allocation process and IIIT Sri City plays no role in seat allocation to students. Merit is the only criteria for admission into IIIT Sri City. For further details on admission process, please visit website www.josaa.nic.in.

313 students were admitted into the 4 year B.Tech programme in CSE and ECE through CSAB/JoSAA.

Admission under DASA and Study in India Programme:

The institute has taken up steps for admission of overseas students through DASA and Study in India Programme, starting from 2019-20. It is proposed to accommodate a maximum of 15% of seats for DASA under Non-SAARC category. Under the Study in India programme, the institute will be offering a 25% fee waiver for 20% of the students, subject to a maximum of 40 students in CSE and ECE programmes. In addition, as a part of the Study in India and UK Education and Research Innovation partnership (UKIERI), IIIT Sri City will be accommodating students from specific universities from the UK to spend a minimum of two weeks to 6 month stay at IIIT Sri City.

2 students ***admitted into the 4 year B.Tech programme in CSE through DASA.***

For more details about DASA visit www.dasanit.org

For more details about https://www.studyinindia.gov.in/

3.2 PG Admissions Policy:

Recognizing the growing importance of Artificial Intelligence & Machine Learning and Cyber Security, the institute senate comprising of leading visionaries in the field of Information Technology namely Prof. C.V. Jawahar, Professor, IIT Hyderabad; Prof. Devendra Jalihal, Professor, IIT Madras, Prof. M. Balakrishnan, Professor, IIT Delhi, Prof. S. Sudarshan, Professor, IIT Bombay, Dr. Gargi B Dasgupta, Director, IBM, Mr. Kannan Babu Ramia, Principal Engineer, Intel, and Mr Srikumar Sreedharan, Product Head, TCS have structured and approved industry-tailored two year M.Tech programmes with emphasis on outcome-oriented curriculum. At present, IIIT Sri City offers two specialized Postgraduate Programs

- M. Tech in Artificial Intelligence & Machine Learning
- M. Tech in Cyber Security

Institute offers admission to GATE qualified candidates through CCMT and non-GATE candidates through institute level selection process. For each programme, fifteen seats are available through CCMT and fifteen seats through the institute selection process. Institute adheres to the reservation policy as per GOI rules.

Admission through CCMT for GATE Qualified Candidates:

GATE candidates with B.Tech./B.E. in CSE/ECE/equivalent branches are eligible to apply for admission through Centralized Counselling for MTech (CCMT) 2022 portal. In the GATE category, candidates should have a valid GATE score and candidates have to follow the procedures of CCMT for the admission. The eligibility criteria for the GATE candidates will be governed by the CCMT rules. Further details on the admission process is available at: https://ccmt.admissions.nic.in/

Admission through Institute Level Selection process for Non-GATE candidates:

Non-GATE candidates with B.Tech./B.E. in CSE/ECE/equivalent branches are eligible to apply for admission through the institute admission process. In the qualifying degree, the candidates should have passed and secured at least 6.5 CGPA (on a 10-point scale) or 60% for GEN/GEN-EWS/OBC, whereas 6.0 CGPA (on a 10-point scale) or 55% in case of SC/ST/PwD candidates.

Non-GATE candidates with an undergraduate degree from CFTI institutes will be screened on the basis of their previous academic records and must have at least 8.0 CGPA. The screened candidates have to appear for a Coding Test and an Interview at IIIT Sri City. Non-GATE General candidates (Non-CFTI or CFTI with < 8.0 CGPA) will be screened on the basis of their previous academic records. The screened candidates have to appear for a written exam at IIIT Sri City. The syllabus of the test is similar to GATE. The outcome of the test will be used to do the second screening. Those who pass the second screening have to appear for a Coding Test and an Interview at IIIT Sri City. Candidates with work experience will be given additional weightage in the selection process.

The detailed eligibility criteria and information regarding the institute selection process is available at: https://www.iiits.ac.in/admissions/m-tech-programme/

3.3 PhD Admission Policy:

Doctoral Programme leading to Ph.D. is offered in the following branches of the Institute:

i) Computer Science and Engineering
ii) Electronics and Communication Engineering

In IIITS there is a provision for 2 categories of registration to the candidates willing to register for PhD Scholars who are willing to pursue Research Studies on a full-time basis can choose **full-time PhD** and working professionals from Govt. R&D Organizations / IT Professionals can choose a **part-time PhD**. Admissions into PhD programs are done twice in a year, during Monsoon and Spring.

Full-time PhD in CSE / ECE

Candidates with a good academic record with M.E. / M.Tech. / M.S. or equivalent degree in any branch of Engineering/ Technology (OR) Exceptional candidates with Master's in Statistics / Mathematics / Master of Computer Applications / Electronic Sciences / Computer Science / Information Technology (or an associated area with strong background in mathematics and programming), or any other related subjects (OR) Exceptional candidates having B.E. / B.Tech or equivalent degree with a CGPA of 9.0 or above and demonstrated research capability by means of research papers, IPs and similar research outcomes may also be considered.

Part-time PhD in CSE / ECE

Working IT Professionals with rich technical background from IT industry/MNCs with employment and residence based in India or Scientists working in Govt. of India Research labs such as DRDO, ISRO etc are eligible to apply. Additionally, the candidates should also fulfill any one of the following criteria: At least a First class Master degree in the applicable areas or Exceptional candidates having B.E. / B.Tech. in applicable areas. In both cases, the candidate having Master degree should have at least 2 years documented industrial experience in reputed MNCs OR Bachelors degree having 5 years documented industrial experience in reputed MNCs.

Admission Process

- Satisfying the minimum eligibility criteria
- Candidates recommended by the PhD Admissions Committee will be called to appear for a written test.
- The candidates shortlisted based on the written test performance need to appear for a personal interview before the Ph.D. Admissions Interview panel.

Selection in Ph.D. programmes will be based on merit. The merit list for all the candidates in each category (Institute scholarships, industry personnel) is based on the cumulative score in the written test, interview, marks in UG / PG, experience, and publications. Considering the background experience, greater weightage may be given for the interview and other components (such as academic qualifications, research publications / patents, work experience, etc.)

4 students were admitted into the PhD programme in Monsoon 2020 and 6 students were admitted into PhD programme in Spring 2021.

4. Academic Programs

4.1 Under Graduate

Under-Graduate Curriculum

IIIT Sri City, Chittoor was mentored by IIIT Hyderabad in the first 6 years. The curriculum at IIIT Sri City follows a practice-theory-practice approach wherein the students are first introduced to real-world engineering concepts by providing hands-on-training. This is followed by rigorous theory-based courses which is again followed up with hands-on courses with intense real-world projects, requiring intense involvement from each student. The curriculum has been designed keeping in mind the best practices of IIIT Hyderabad, IITs and leading institutions of higher learning globally. The Institute combines top class education with pioneering research, whereby under-graduate students are encouraged to participate in different research and technology development projects, starting from the end of 2nd year. Notably, the curriculum offers the flexibility of Honors program, wherein the student can hone their skills by working on a specific area for a period of 2 years and bring in a substantial impact on their area of interest. It is proposed to offer Minors in areas such as Cyber Security, Cyber Physical Systems, Smart Manufacturing, AI & Machine Learning, FinTech, Bio-Informatics, Blockchain, etc. In addition, it is proposed to offer a semester-long project in an Industry or at a reputed research lab, as part of the curriculum.

Undergraduate with specialization

At IIIT Sri City, the eligible students could pursue B.Tech. with a specialization in AI & ML, cyber security and Cyber physical systems by doing additional credits and semester long internship projects.

Specialization in AI ML

Artificial Intelligence has emerged with its potential ability to solve complex societal problems of recent times including education, healthcare, security, information forensics, visual understanding, efficient transportation, increased efficiency in providing e-governance services to the public, etc. Many countries have made focused national efforts. The Government of India has also initiated widespread discussion on the role of AI in India. Niti Ayog has suggested the dedicated AI plan to the Govt. of India. Moreover, the top IT industries such as Google, Amazon, IBM, Microsoft, etc. have invested huge funds in AI based research and development in recent days. Many startups are also emerging nowadays in AI across the globe.

Being an Institute of National Importance in Information Technology, the specialised B.Tech. The Programme in Artificial Intelligence & Machine Learning will boost the IIITS ecosystem further and will produce highly skilled manpower. The B.Tech. in Artificial Intelligence & Machine Learning aims to bridge the urgent needs of the industry and to produce the high-end AI scientists and engineers for the society. The primary aim of this specialised program is to produce graduates by providing rigorous training in the priority areas of Artificial Intelligence. The B.Tech. with a Specialisation in AI & ML

would strengthen the students such that they can become AI world leaders and shape India's future in a better way.

Artificial Intelligence and Machine Learning (AI & ML) has been identified as one of the top areas for jobs and research. This domain will have more jobs as compared with any other plain B.Tech programme in CSE alone. Our institute took so many efforts to launch a specialization in AI & ML to provide our students preparedness to meet the demand of Engineers with AI & ML knowledge and skills. So it is advisable to the current final year students to opt for the specialization in Artificial Intelligence and Machine Learning. This would maximize your chances to get placed in a good company and a decent salary.

For a plain B.Tech degree in CSE, the current final year students will have to complete 156 credits. For B.Tech with Honors, students have to complete 164 credits.

Additionally, Students may opt for the following courses that are offered with practice oriented learning as part of the specialization in AI & ML:

a) Deep Learning
b) Reinforcement Learning
c) Industry Applications of AI & ML
d) Semester Long Project

The items a) - c) carries 4 credits each and it involves teaching by experts from industry and academia. The semester long project carries 8 credits and the work should be carried out in industries that engage in AI & ML. Thus in total, a student opting for AI & ML specialization should take 20 credits additionally to earn B.Tech. degree with a Specialisation in AI & ML.

Specialization in Cyber Security

Cyber Security jobs that are available currently and in the subsequent years are outstripping the supply of IT jobs. The inference is that there is an increasing demand for Cyber Security professionals but the companies are finding that there is a lack of people with Cyber Security profiles. In fact NASSCOM has called to create one million Cyber Security jobs before 2025 (to meet the demands) and all these point to the pressing need to create these expertise in the university for students graduating in the coming years. In the presence of such opportunities, we focus on developing expertise in Cybersecurity through specialized post graduate programme in cyber security.

B.Tech. with a specialization in Cyber security is aimed at preparing brilliant minds to meet the requirements of highly skilled manpower in the area of Network and Data Security. IIIT Sri City Community is well connected with various top-tier industries that work in various thrust areas of Information Security. The proposed specialization consists of a variety of courses from information security, and some of the advanced electives in the respective field.

For a plain B.Tech degree in CSE, the current final year students will have to complete 156 credits. For B.Tech with Honors, students have to complete 164 credits.

Additionally, Students may opt for the following courses that are offered with practice oriented learning as part of the specialization in Cyber security:

a) Introduction to Cyber security
b) Network and Data Security
c) Applied Cryptography
d) Semester Long Project

The items a) - c) carries 4 credits each and it involves teaching by experts from industry and academia. The semester long project carries 8 credits and the work should be carried out in industries that engage in Cyber Security. Thus in total, a student opting for Cyber Security specialization should take 20 credits additionally to earn B.Tech. degree with a Specialisation in Cyber Security.

Specialization in Cyber Physical System

CPS is an amalgamation of physical processes, wireless networking and extensive computing. The physical processes are monitored with varied sensors and then communicated through networking to create an automated feedback-based embedded control system. The automated/ smart systems are modeled from the data points through technological abstractions of data analytics, machine learning and pattern recognition.

Over the last 3-5 years, there has been an exponential growth in the number of companies pursuing this area and offering technological opportunities. In this regard, given the large number of applications in manufacturing and electronic-based industries, IIIT Sri City offers BTech program with specialization in CPS. IIIT Sri City is the first IIIT and one of the few Universities in India to offer such a specialization for BTech students. It is an interdisciplinary program that would train and prepare students for the next wave of required technological skill-sets.

For BTech in ECE with CPS specialization, a student has to do 20 extra credits. This includes 3 additional 4-credit courses and semester long internship. The courses to be done for CPS specialization are offered with practice oriented learning and typically include:

1. Micro-Sensors and Actuators (MSA)
2. Introduction to CPS
3. Applications of AIML in CPS

The semester-long internship is for 8-credits to be carried out in the industry that engage in different areas of CPS.

Moving forward, the Institute aims to set-up a CPS/IIoT lab for Master's program wherein we would collaborate with the Hi-Tech manufacturing industries in Sri City.

Focus on UG Research through Honors Programme

In order to promote UG-Research, we have a unique Honours programme wherein the students can work on a particular area under a faculty or group of faculty for a period of 4 semesters. They earn their Honours degrees by producing research publications or Intellectual property or a software/ hardware product.

4.2 Post Graduate

IIIT Sri City offers two year specialized MTech degree programmes in: i) Artificial Intelligence & Machine Learning (AI & ML), and ii) Cyber Security (CS).

4.2.1 MTech in AI & ML

Recognizing the growing importance of Artificial Intelligence & Machine Learning, the institute senate comprising of leading visionaries in the field of Information Technology namely Prof. C.V. Jawahar, Professor, IIT Hyderabad; Prof. Devendra Jalihal, Professor, IIT Madras, Prof. M. Balakrishnan, Professor, IIT Delhi, Prof. S. Sudarshan, Professor, IIT Bombay, Dr. Gargi B Dasgupta, Director, IBM, Mr. Kannan Babu Ramia, Principal Engineer, Intel, and Mr Srikumar Sreedharan, Product Head, TCS have structured and approved an industry-tailored two year M.Tech programme in Artificial Intelligence & Machine Learning, with emphasis on outcome-oriented curriculum. The first semester of the programme offers foundational courses such as Machine Learning, Artificial Intelligence and Knowledge Representation, Advanced Data Structures and Algorithms, Mathematical Foundations, and AI & Ethics. The students will be individually mentored by faculties from the first semester onwards and will be encouraged to take up either industrial internships or to work on sponsored research projects with the institute faculties. The second semester of the programme offers two core courses of Deep Learning and Data Analytics & Visualization. Additionally, many electives are also being offered to facilitate deep understanding and research in the allied areas of AI & ML such as Computer Vision, Natural Language Processing, Information Retrieval, Data Mining, Robotics, Probabilistic Graphical Models, Big Data Analytics, Reinforcement Learning, and Advanced Optimization. The students are encouraged to take up year-long industrial projects during the last two semesters of the programme facilitating industry connect and effective orientation to industry practices.

MTech AI & ML Curriculum

The curriculum of the MTech Programme covers a total of 64 credits, necessary for completing graduation requirements. The total number of 64 credits is divided into two parts: a) course work that spans over the first two semesters requires the completion of 40 credits and b) the industry – based project work requires the completion of 24 credits that lead to MTech Dissertation.

Semester 1

1. Artificial Intelligence and Knowledge Representation
2. Machine Learning
3. Advanced Data Structures and Algorithms
4. Mathematical Foundations
5. AI and Ethics (Seminar Course)

Semester 2

1. Deep Learning
2. Data Analytics and Visualization
3. Elective-1
4. Elective-2
5. Elective-3

Electives:

1. Computer Vision
2. Natural Language Processing
3. Information Retrieval
4. Data Mining
5. Robotics
6. Probabilistic Graphical Models
7. Big Data Analytics
8. Reinforcement Learning
9. Advanced Optimization

MTech AI & ML's Senate & Programme Advisory Group

The Senate of IIIT Sri City has senior academicians from institutes like IIIT Hyderabad, IIT Madras, IIT Bombay, IIT Delhi etc. and industry experts from leading organizations such IBM, Intel, TCS etc. For Senate details visit http://www.iiits.ac.in/home/governance/senate/

Programme Advisory Group (PAG) helps the institute formulate the curriculum and support effective delivery of the programme. The PAG of MTech AI & ML consists of the following experts:

1. Prof. Balaraman Ravindran
   Professor & Head, The Robert Bosch Centre for Data Science and AI, IITM
2. Dr. Manish Gupta
   Director
   Google Research
3. Ms. Shalini Kapoor
   IBM Fellow & CTO for AI
   IBM Research
4. Dr. Venkatesh Sarangan
   Principal Scientist
   Tata Consultancy Services

4.2.2 MTech in Cvber Security

The recent advancement of information sharing over the Internet increases cyber threats to the organizations. It requires security related sophisticated knowledge and tools to keep the systems secure from external threats. Around the world as well as in India, there is a high demand for skilled cyber security professionals who are well educated about the various aspects of cyber security. Taking motivation from this, IIIT Sri City offers a two-year M.Tech degree programme specialised in Cyber Security with emphasis on Outcome Based Education (OBE). The programme advisory group constitutes cyber security experts working at reputed organizations/universities such as Ernst & Young, IBM, KPMG, TCS, City University of London, and Data Security Council of India (DSCI). The advisory group ensures timely revision of the curriculum to ensure industry relevance and graduate employability. Being an Institute of National Importance in Information Technology, IIIT Sri City is already running the B.Tech. program with Cyber Security specialization. Thus, the M.Tech.in Cyber Security program will boost the IIITS ecosystem further and will produce highly skilled manpower to the industry.

MTech Cyber Security Curriculum

The curriculum of the MTech Programme covers a total of 64 credits, necessary for completing graduation requirements. The total number of 64 credits is divided into two parts: a) course work that spans over the first two semesters requires the completion of 40 credits and b) the industry –based project work requires the completion of 24 credits that lead to MTech Dissertation.

Semester 1

1. Introduction to Cyber Security
2. Algorithms and Complexity Analysis
3. Network and Data Security
4. Software Security
5. Cyber Security Regulations (Seminar Course)

Semester 2

1. Cryptography
2. Machine Learning Applications for Cyber Security
3. Elective - 1
4. Elective - 2
5. Elective - 3

Electives:

1. Threat Intelligence
2. Malware Analysis and Digital Forensics
3. Cyber Physical Systems Security
4. Software Defined Networking Security
5. Mobile and Wireless Security
6. Blockchain Technology

MTech Cyber Security Senate & Programme Advisory Group

The Senate of IIIT Sri City has senior academicians from institutes like IIIT Hyderabad, IIT Madras, IIT Bombay, IIT Delhi etc. and industry experts from leading organizations such IBM, Intel, TCS etc. For Senate details visit http://www.iiits.ac.in/home/governance/senate/

Programme Advisory Group (PAG) helps the institute formulate the curriculum and support effective delivery of the programme. The PAG of MTech Cyber Security consists of the following experts:

1. Mr. V. Anand Kumar
   Director, Managed Security Services,
   IBM

2. Prof. Muttukrishnan Rajarajan
   Director, Institute for Cyber Security,
   City University of London

3. Dr. Rajeev Mukundan
   CTO Cyber Security,
   TCS

4. Mr. Sastry Krishna Pendyala
   Partner,
   Ernst & Young, Hyderabad

5. Mr. Akhilesh Tuteja
   Global Cyber Security Practice Co-leader, Partner
   KPMG

6. Mr. Vinayak Godse
   Vice President,
   Data Security Council of India (DSCI)

4.3 PhD

IIITS has significant focus on research demonstrated through sponsored projects and scholarly publications. IIITS envisions to be a globally known institution for IT education, research and development. The institute has special thrust to attract and retain talented faculty members who can make a mark in teaching and research at the international level. The current faculty members at IIITS are from leading universities from India and abroad with excellent teaching and research credentials. The institute offers the following Ph.D. programmes that focus on all areas of computing:

- PhD in Computer Science and Engineering
- PhD in Electronics and Communication Engineering

The Institute has started a Part-Time PhD programme for personnel from industry and Government of India Research labs such as DRDO, ISRO etc. from Monsoon (July) 2019 onwards.

PhD Curriculum

Duration of the programme: The maximum period to complete the programme is 6 years for full-time candidates and 7 years for Part-time candidates. Scholarship will be given up to 4 years for full-time candidates or till the date of thesis submission whichever is earlier.

Doctoral Committee: Every DC committee includes the following composition of members - Chairman, Research Guide, Co-Guide (if any), Internal member (CSE), Internal member (ECE), Industry co-guide / Industry member, External member from Industry / Research establishment.

Course work: The research scholars should complete four relevant courses prescribed by the Doctoral committee.

Industry Internship: The PhD students under full-time category are encouraged to take up industry internships in top-tier MNCs and Research organizations for a duration of 4-6 months during the entire PhD programme.

Programme highlights:

- Industry-oriented PhD Programme
- Opportunity to do summer internship in industries
- Funded PhD programme for full-time students
- Flexible attendance scheme for part-time PhD students
- No campus stay requirement for completion of course for part-time students
- Inclusion of Industry expert in doctoral committee

4.4 Academic Performance

Semester	Subjects	No. of students enrolled	No. of students passed	Pass percentage
Monsoon 2020	**UG 1 Courses** Computer Programming Overview of Computers Digital Logic Design Discrete Mathematics and Probability Theory Communication Skills-1 **UG 2 Courses** Advanced Data Structures and Algorithms Computer Organization and Systems Database Management Systems Control Systems Embedded Systems Circuits and Network Analysis Object Oriented Programming Communication In Organization Mathematics-3 **UG3 Courses** Service Oriented Application Development Compiler Design Information Retrieval Introduction to Cyber Security Machine Learning Cloud Computing Introduction to VLSI Digital Signal Processing Introduction to Cyber Physical Systems Electronic Packaging Internet of Things Digital Image Processing Statistical Data Analysis Pattern Recognition IT Project Management Energy and Environment Science Electric Vehicles Innovation and Entrepreneurship Foundation of Human Values Biotechnology Differential Equations	**UG 1 - 315** **UG2 - 263** **UG 3 - 250**	**295** **245** **238**	**93.6%** **93.1%** **95.2%**

	UG4 Courses Computer Graphics and Multimedia Principles of Cyber Physical System Computation Natural Language Processing Agent Based Modeling and Simulations Digital Twins Concepts and Applications Wireless Communication Electronic Packaging Microwave Engineering and Radar Systems Digital Image Processing Statistical Data Analysis Pattern Recognition Threat Intelligence Soft Computing and Evolutionary of AI IT Project Management Energy and Environment Science Electric Vehicles Innovation and Entrepreneurship Foundation of Human Values Biotechnology Differential Equations	**UG4 - 209**	**207**	**99%**
Spring 2021	**UG 1 Courses** Basic Electronic Circuits Datastructures and Algorithms-1 Mathematics-2 Signals and Systems Communication Skills-2 **UG 2 Courses** Computer and Communication Networks Artificial Intelligence Machine Learning Theory of Computation Web Application Development Fundamentals of Communication Introduction to Cyber Physical Systems Analog Circuits Electromagnetics and Transmission Lines Communication Skills-4 **UG 3 Courses** Enterprise Application Development Distributed Computing Computer Vision Deep Learning Network and Data Security High Performance Computing	**UG1 - 308** **UG2 - 265** **UG3 - 250**	**294** **246** **243**	**95.4%** **92.8%** **97.0%**

	Cloud Computing Micro Sensors and Actuators Opto-nano Electronics Intelligent Autonomous System Brain Computer Interaction Cryptography Operational Mathematics Data Analytics BioInformatics Foundation of Human Values Personal Growth Lab Advanced Communication Skills **UG4 Courses** Data Analytics Cryptography Operational Mathematics Brain Computer Interface Micro Sensors and Actuators Model based Data Analysis Opto Nano Electronics Distributed Computing Computer Vision Deep Learning Cloud Computing High Performance Computing	**UG4 - 209**	**208**	**99.5%**

5. Placements and Internships
(Summer internship and semester long projects)

5.1 Summer Internships

Students at IIIT Sri City are highly encouraged to seek internships during summer irrespective of which year they are enrolled in the institute.

While it may sound quite aspirational that we are encouraging even the UG first year students to seek internships, we believe that an industry experience (from the first year) will go a long way in helping a student launch a bright career, from our institute. So, we encourage students as soon as they join to even get work-from-home internships. We feel that every single aspect of learning should be implemented rigorously and executed with due diligence. Internships are one such milestone at the IIITS.

Of course, our focus is to get the pre-final year students to get summer internships, as there is a good chance that these internships can get converted to Pre-Placement Offers (PPO). The Placement Office take significant effort to get internships to students and does the following:

- Contact companies routinely to see internship opportunities for pre-final year students,
- Share various contests that are happening domestically in the country and internationally,
- Seek companies for projects so that students can complete the projects at home and add it to their resume, and
- Expose students to various international internships opportunities.

- Students are also encouraged to take academic internship opportunities both here in India and abroad. The placement office also brings such opportunities to students so that they can apply for many opportunities.

Microsoft, Amazon, Yahoo, Swiggy, ZS Associates, Bosch, Commvault are few of them where our students are currently indulged in their high end lead projects.

5.2 Semester Long Project

Semester-long projects is one of the flagship programs of our institute and we have brought in novel aspects into this program so that it benefits the students. There are at least two ways that students benefits from these projects:

1. Students who aspire for their dream jobs sign-up with companies for a Semester-long projects program with an opportunity to convert into a full time position.
2. Often the companies visiting the campus for recruitment also offer students an opportunity to join as interns before the students join in the full time positions in the same company. So, students have a gradual transition from student to their full time roles.

The students get eight credits for these projects, and we have a rigorous review. The students who had opted for a Semester-long project only, will be evaluated twice by the industry mentor and twice by the institute faculty mentor. A team of two faculty members carry out the final evaluation, which includes the internal faculty mentor.

Following are some of the key numbers for the Semester-long projects in the year 2021:

Number of Students Doing SLP	139
Duration of Internship	4 to 6 months
Stipend for the Internship	Rs. 10000 to Rs. 1, 20, 000

5.3 Campus Placement:

The placement bird's eye view information is shown in the below Table 1 and detailed placement information for the academic year 2020-2021 is shown in Table 2.

Table 1: Placement overall statistics of the students who graduated in 2021

2017 - 2021 Batch -Placement Details		
S.No.	**Placement Statistics (On-Campus)**	**Number**
1	Total number of students	208
2	Number of students expressed interest for campus placements	152
3	Percentage of students placed	95.39%
4	Maximum salary received	43 LPA
5	Average Salary	12.00 LPA
6	Total Number of Job Offers	145
7	Number of placed students for CSE	115
8	Number of placed students for ECE	30
9	Placement % for CSE Branch	96.63%
10	Placement % for ECE Branch	90.09%
11	Number of Companies Visited	124
12	Number of Entrepreneurs	Nil
13	Number of higher studies opportunities received	01

Some observations from Table 1 are as follows:

- The *number of companies* visiting the campus is more than required for the number of students eligible in a given year. So, it gives students a choice to sit in companies of their interest. Students also get exposure to various companies that are ready for recruitment in the market.
- The *Cost to the Company (CTC)* package that IIITS gets for campus placements is on par with any premium institute in the country. The job roles that students get are very interesting to them in that it fosters their career growth.
- The *highest domestic package* that an IIITS student receives in the academic year 2019-2020 is 43 lakhs per annum.
- Some students also get *international job offers* from big companies. (not shown in the Table)
- The number of students who are placed (145) is close to the number of students who have *registered for the placement* (152).
- Our students have been recruited in several deep-tech startups such as SpringML, Nvipani, CeWIT, Commvault, Zoho, etc.

Student Readiness for Placements

- The institute offers *specializations for undergraduate students* in areas such as AI & ML, Cyber Security, Cyber-Physical Systems, and with more specialization areas in the coming years. In addition, our students have expertise in other areas such as Software Development Engineering, Computer Vision, Data Analytics, IoT, Wireless Communication, Smart Transportation, and others.

- Before the companies visit the campus for placements, students polish their soft skills with courses such as *Aptitude and Reasoning, Advanced Communications Skills, and Competitive Programming*. It is worth mentioning that Communication Skills is being taught as a set of four courses in the first two years to bring students to the required levels in reading, writing, listening, and speaking.

- We also place an emphasis on developing graduates with specialized competencies and skills to take up *pivotal roles in Startups*. In addition to preparing the students for various job sectors, IIITS curriculum also caters to students who are inclined towards starting their own companies with courses such as Entrepreneurs and Startups and Small Business Management; students also understand the environment in startups (apart from learning how to build their own). Further, to support innovative startups from students, IIITS has launched the *Technology Business Incubator* with initial funding from the Ministry of Electronics and Information Technology (MeitY), named Gyan Circle Ventures.

- Importantly, our students have secured *semester-long industry internships and jobs* in *several MNCs* including Microsoft, Amazon, Cisco, American Express, Bank of New York, IBM, National Instruments, etc.

- Our student's other achievements include:
  - Won Microsoft AI challenge, Google Android Hackathon;
  - Runner ups at Smart India Hackathon;
  - Top 10 in Amdocs Hackathon; and
  - Selected (six students) in Google Summer of Code (GSoC).

Institute Preparedness for Placements

- IIITS also *engages with industry* for their research and the institute routinely brings faculty from the industry for teaching industry-oriented courses. The institute conducts many workshops in a given year partnering with industry professionals. These activities further strengthen the industry-institute relationship and the institute benefits in terms of placing the students in those companies that the institute is tied with.
- At IIITS, a structured and systematic effort for placements and training is present with a group of faculty members, staff, and students under the leadership of the Director. Placements is one of the *priority areas of the institute* and required resources in terms of manpower, etc. are sufficiently allocated. For example, there are placement chairs, training and placement officers, and student placements coordinators.

Companies Visiting IIITS

1. The Campus Placement started in the *first week of July 2021* and the companies that visited the campus for recruitment not only hired both the CSE and ECE batch students but the companies (listed in Table 2) were also from varied categories: multinational companies, successful startups, cutting-edge technologies computer science companies, and core ECE companies. Some of our multinational recruiters represented industries ranging across Consulting, E-Commerce, Hi-Tech, Hospitality, and Health Care.
2. IIITS attracts *product-oriented companies* mostly and the diversity of the companies that come for placements cater to the needs of the students. Big MNCs, Big service-oriented companies (but hiring for product role positions), established start-ups, promising startups in recent years, core companies (for ECE branches), etc., are the categories of the companies that visited IIITS in recent years.

6. Students Development Activities (SDC):

6.1 Workshop on basic computer skills for adopted villages school students (UBA and NSS)

School closures due to the nationwide lockdown in March 2020 meant that children were disengaged with formal education for a prolonged period. The resulting talks around e-education exposed India's digital divide, with only 24 percent of households having access to the internet. Children studying in government schools were hit particularly hard, with a recent study indicating that more than 80 percent of government school students.

The government has recommended moving to online learning as a stop-gap arrangement to evade any disruptions in academic calendars. Technology and e-learning is now the way to transform the education sector. It is showing a positive transformation and schools and colleges in rural areas are adapting to technology day by day. It is motivating to see that even Tier III and rural areas are stepping up to transform traditional education into a digitally-enhanced process.

While the benefits of online learning are manifold, there are still many roadblocks in the way ahead towards making education an entirely digital (online) phenomenon. When it comes to Online Education or E-Learning, rural population is not completely equipped with utilities like fast internet, uninterrupted power supply, and electronic devices. There have been improvements regarding basic infrastructural facilities but many rural areas in India are still grappling with these challenges to make education completely digital or online.

Some of the major challenges that can be enlisted in this context are:

Digital Literacy and Infrastructural Support

These are prominent hurdles that come in the way of enabling online education in the rural regions of India. Though the power and network infrastructure have improved leaps and bounds in the remote areas of the country, there is still a room for improvement. Teachers and students in villages are becoming more accepting towards digital means of learning, but the infrastructural facilities there have not developed fully to become at par with what online learning require. Steady flow of electricity and lack of high speed internet still pose major problems for the rural population.

Limited availability of technological devices

While we look at the domain of digital learning, it is imperative to consider the availability of the right devices to every student for accessing digital content. Not a lot of people in rural India have access to personal laptops or computers, and phone screens are not conducive to long learning hours. Also, data packs and their costs can be a big deterrent both for teachers as well as learners, especially for live classes. Many students either don't have personal laptops/smartphones or they are available for a limited time. Hence, the learning remains restricted with the limited availability of technological devices.

Lack of Familiarity with Digital Technology

While Smart Classrooms and Digital Learning have already made a way in urban educational setups, some rural countries still rely on traditional teaching methods for their lessons. Therefore, shifting from traditional pedagogical methods to the digital one cannot happen overnight. Teachers as well as students require proper training and more user-friendly platforms to make them familiar with digital technology so that they can be comfortable teaching/learning using them.

To overcome the above stated problems and to help village school students to link their education with the technology, IIIT Sri City conducted basic computer skill workshop on 26th January 2021 through it NSS and UBA Cell. During the workshop school students are thought about different learning apps, online classrooms and provided institute infrastructure to learn through e-learning. Students and provide individual computer for their personal experience, and the experts trained the students on use smartphone for education purpose as well.

About the workshop

A total of 40 students from different villages are participated in the workshop. The students are given training about the learning apps and e-education. The students are given personal system to use along with the training. Various lectures are arranged on computer tools such as Microsoft word, Excel, PowerPoint’s, internet etc. Basic hardware information also provides to students to understand the parts of the computer. At the end of the workshop a small quiz conducted to know the outcome of the workshop. In this quiz all the students performed well. Top three performers from Girls and boys are encouraged with exiting gifts.

6.2 Covid 19 Mask and Sanitizer Awareness Campaign (UBA)

IIIT Sri City has adopted five villages under the govt. scheme of UBA and NSS. IIIT has organized various activities for the development of these villages and villagers life skill. During this pandemic members and coordinator of UBA and NSS Cell has visited Tondure village (one of the adopted village) and distributed the mask and hand sanitizers to the village youth and working women. The main aim of the activity was to create awareness of wearing the mask and using hand sanitizer during the work. The awareness is created among the village youth so that the awareness can reach throughout the village from their youth. The working women in the village who works in different companies in Sri City are unable to visit market regularly to purchase the hand sanitizers. IIIT Sri City provided hand sanitizers which will help them during the work.

IIIT Sri City representatives briefed the how we can defeat Covid 19 by wearing mask, using sanitizer and keeping 6 feet distance from each other.


6.3 National Road Safety March 2021

As per the detailed letter and guidelines from The Ministry of Road Transport and Highways, Indian Institute of Information Technology Sri City, Chittoor NSS Cell has observed National Road Safety Month 2021 in campus. During these days various activities have been planned and

to create awareness of safe driving and traffic rules. The detailed activities have mentioned below:-

1. Basic Life Support Training to IIITS employees: IIITS employee's had participated in Basic Life Supports Camp and learned Cardiopulmonary resuscitation (CPR). This training helps to save life of a people when minor or major accidents happen.

2. Displaying Road Safety Banners in the campus and Roads: A Road safety banner with safety information has been displayed in the campus and on the main road of city.

3. Painting Competition for School Students: Painting Competition with theme of "Road Safety awareness" has been organised for the private and government school students in IIITS campus. In the competition 100 school students had actively participated and given the message of road safety with their paintings which were displayed throughout the campus.

4. Workshop on Road Safety: Workshop on road safety was organised and various safety and traffic rules has been discussed during the workshop.

5. Road Safety Awareness Campaign: Road Safety awareness campaign was organised with the support of Sri City Hitech Police and Security. During the campaign people who were not wearing helmets, not wearing seat belts or speaking over the mobile while driving have been stopped and briefed about the danger that may cause due to their negligence. A well-wishing flowers and chocolates for their family and safety note have been given to them.

6.4 74th Independence Day with Corona Protocol

India's Independence Day reminds the country's citizens of all the sacrifices the freedom fighters have made to secure the country's future. Since its independence, India has made stellar progress in every field, including education, military and space programmes. Indians across the nation will be commemorating India's independence from British rule by celebrating its 74th Independence Day on August 15, 2020, but with a slight twist. Owing to the ongoing coronavirus pandemic, there will be no social gatherings, instead, all states and government offices have been asked to webcast their events and celebrations. Even the gathering at the Red Fort, where the flag is hoisted every Independence Day, will be limited. In lieu of the precautions taken, there will not be any grand performances with the military bands either. Ideally, the citizens across the country sing and dance on patriotic songs, hoist the tricolour flag and enthusiastically recite poems remembering the sacrifices of India's freedom fighters.

As per the directives received from Directorate of Govt. of India. IIIT Sri City, Chittoor has celebrated 74th Independence Day of India as per the guidelines. The event details are given below:

1 Flag Hoisting by Director of the Institute 8:00 AM
2 National Anthem 8:00 AM
3 Independence Day Message by the Director of the Institute8:05 AM
4 Distribution of Chocolates or Sweets to the Faculty/Staff Present
5 Dispersal


6.5 International Day of Yoga 2020

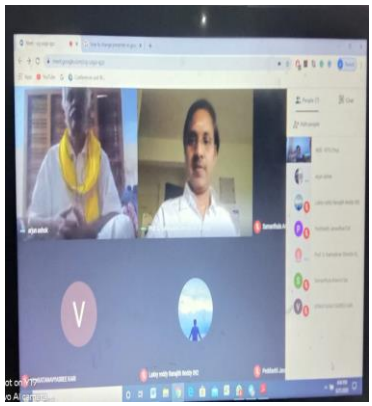
The International Day of Yoga was celebrated on 21st June 2020 to bring peace, harmony, happiness and success to every soul in the world. Yoga is a mental, physical and spiritual practice that needs to be carried every day.

IIITS NSS Cell Sri City, Chittoor has taken pride in organising the event in IIIT Sri City, Chittoor campus. Due to the current pandemic Covid' 19 situation, there was no gathering, all the events were planned through an online platform. The theme of this year's IDY "Yoga @ Home Yoga with Family" so we planned three events which have been done from their home through online and with the support of the social website.

1) Faculty/Staff/Students were encouraged to practice yoga at home and which was performed on 21st June 2020 morning 07:00 am to 07:45 am with the live telecast of the common yoga protocol in Doordarshan.
2) Online Yoga Lecture and Interaction with Guru Sthanumurthy, All India promoter of Yoga Education in Vidhya Bharthi Akhil Bhartiya Sikshan Sansthan, organised at 04:00 pm.
3) Online quiz on the General Awareness of International Day of Yoga, History of ancient yoga and benefits of practising Yoga was organised at 05:00 pm.

With the theme for this year's IDY "Yoga @ home and Yoga with Family" IIIT Sri City Faculties, Staff and Students has wholeheartedly participated with their family members and shared their pictures and videos. The highlights of the videos were Suryanamaskar, Pranayam, Asanas and Meditation.





IMPACT

Each batch of students graduating from the institute would be looking for opportunities for good jobs and higher studies. It will be one of the joyous moments if all the graduates are able to get what they aspire for, as they leave the campus.

Although the overall preparedness is relatively better, the institute is yet to demonstrate that the students are able to garner good jobs, comparable to the top few IIITs. There is a need to focus on the strengths and areas of improvement at the individual level, through a systematic approach. It broadly focuses on individual-based mentoring for career guidance to achieve defined goals.

Fortunately, we have excellent faculty members who have received their education from leading universities, and some of them have significant industry experience. No other comparable institute has this unique advantage, which could be exploited beyond achieving excellence in teaching-learning and research. Thankfully, they also consider the success of the students, achieved through jobs and higher studies, as an integral part of their role as faculty.

IIIT Sri City is delighted to announce that the faculty members have committed their support to a new mentorship programme, called **IMPACT.** Under this programme, a group of students are assigned to each faculty for comprehensive guidance. They will guide and support the students to develop necessary skills & competencies and ensure that their career goals are achieved.

IMPACT is a semi-structured programme. While it is structured in setting goals, tracking progress and achieving final results for each student, it is unstructured in the process of engaging with students. Each faculty may use diverse formal-cum-informal approaches to achieve effectiveness.

The faculty members will be having regular interactions with the students on a weekly basis ensuring the success of the IMPACT programme and helping the students come out in flying colours.

IMPACT aims to have a significant impact, resulting in transformational outcomes. Many great things in the world have started in small ways. Everybody should work together to achieve great things which would also take the institution to greater heights.

Favourite 25

Support for Slow learners:

The institute has a significant focus on improving the quality of teaching-learning so as to create valuable opportunities for placements and higher studies for students. However, due to socio-economic and rural backgrounds, a section of the first year students is not able to cope up with the rest of the class. Special efforts are being taken to support such students. Firstly, students whose performance in the continuous assessment falls in the bottom 25% of the class are identified. These students are mentored and supported through a programme, called "Favorite 25". Faculty, students, staff and others put in their voluntary efforts to help these students to improve their performance. In addition, Formative Assessment (FA) has been introduced to help students who fail in the semester examinations. Under Formative Assessment, students undergo additional classes and mentoring, and clear the subjects by completing all the continuous assessment and final examination before the beginning of next semester. This helps students to achieve the required level of competences so that they are fully prepared to take up advanced courses without dropping for a year.

7. People/ Human Resources

7.1 Faculty:

In order to meet the present and future geo-socio-economic needs, we lay great emphasis on recruiting world class faculty who are strong in teaching and research areas.

All faculty members hold Ph.Ds from the finest institutes across the globe with a minimum of three years of post-doctoral experience and almost all have significant global exposure. They have published papers in various national and international journals and conference proceedings and attended / organized several workshops, both at national and international level.

SNo.	Name	Designation	Domain
1	Prof. G.Kannabiran	Director	CSE
2	Dr Rajendra Prasath	Associate Professor	CSE
3	Dr Viswanath Pulabaigari	Associate Professor	CSE
4	Dr Balaji Raman	Associate Professor	CSE
5	Dr Shiv Ram Dubey	Assistant Professor (Grade I)	CSE
6	Dr Snehasis Mukherjee	Assistant Professor (Grade I)	CSE
7	Dr Odelu Vanga	Assistant Professor (Grade I)	CSE
8	Dr Tapas Pandit	Assistant Professor (Grade II)	CSE
9	Dr Mrinmoy Ghorai	Assistant Professor (Grade II)	CSE
10	Dr Neha Agrawal	Assistant Professor (Grade II)	CSE
11	Dr.Balasubramanian Kandaswamy	Assistant Professor	CSE
12	Dr Himangshu Sarma	Assistant Professor	CSE
13	Dr Sreeja SR	Assistant Professor	CSE
14	Dr Annushree Bablani	Assistant Professor	CSE
15	Dr Bheemappa Halavar	Assistant Professor	CSE
16	Dr Shhathanaa	Assistant Professor	CSE
17	Dr Amit Praseed	Assistant Professor	CSE

18	Dr Rakesh Kumar Sanodiya	Assistant Professor	CSE
19	Dr Kandimalla Divyabramham	Assistant Professor (Grade I)	ECE
20	Dr Raja Vara Prasad Yerra	Assistant Professor (Grade I)	ECE
21	Dr Achintaya Kumar Sarkar	Assistant Professor (Grade I)	ECE
22	Dr Priyanka Dwivedi	Assistant Professor (Grade II)	ECE
23	Dr Anish Chand Turlapaty	Assistant Professor	ECE
24	Dr K.Siva Prasad	Assistant Professor	ECE
25	Dr E.Paul Braineard	Assistant Professor	ECE
26	Dr.Mainak Thakur	Assistant Professor	Mathematics
27	Mr R.Sundar	Lecturer	ECE
28	Ms Prasanna Lakshmi M	Lecturer	Mathematics
29	Dr Aneel Yagabathina	Junior Lecturer	English

7.2 Visiting Faculty

SNo.	Name of the faculty	Course Name
1	Communication in Organization	Dr.V.S.Ramakrishnan Dr.Shrimathy Venkatalakshmi Dr.P.R.Sujatha Priyadharshini
2	Internet of Things	Dr Munesh Singh
3	Computer Graphics and Multimedia	Dr Pratik Shah
4	Threat Intelligence	Mr Chinmaya Mishra & Mr Avkash Kathiriya
5	Soft Computing and Evolutionary of AI	Dr Monidipa Das
6	IT Project Management	Mr Jaydip Das Mr Sivasubramanian
7	Innovation and Entrepreneurship	Mr Satish Medapati
8	Foundation of Human Values	Ms Kranthi YS
9	Biotechnology	Dr Sailatha Ravi
10	Introduction to Cyber Security	Mr Mohan Ram & Dr Harish Ramani
11	Cloud Computing	Dr Shridhar Domanal
12	Personal Growth Programme	Dr. Nagarani M
13	Contemporary Gandhi	Mr G.Prasanna
14	Operational Mathematics	Mrs. Srivalli Kiranmayee
15	Advanced Communication Skills	Mr. Kezia Hitesh

16	Aptitude and Reasoning	Mrs. Shabana
17	Nature-Climate Change	Dr. Yogananda Rao
18	Communication Fundamentals	Dr Shrimathy Venkatalakshmi Dr V.S.Ramakrishnan Dr Karthika VK Dr Naresh GV
19	Communication Skills 4	Dr Shrimathy Venkatalakshmi Dr V.S.Ramakrishnan Dr Karthika VK
20	Personal Growth lab & Communication skills 4	Dr Jose MF
21	Bioinformatics	Dr Sailatha Ravi
22	Advanced Communication skills	Mr Ravi Thilagan

7.3 Staff

SNo.	Name	Designation
1	Evani VSSR Somayajulu	Manager, Registrar's Office
2	P V Someswara Rao	Asst. Manager (Accounts)
3	K Lalin Kumar Reddy	Assistant Manager-F&A
4	S.Jyothi Rani	Asst. Manager, EC Lab
5	G Siri Babu	Assistant Manager
6	Udiyapuram Tulsidas	Physical Education Instructor
7	R Venu Gopal	Engineer, System Admin
8	Vijay Kumar S	Engineer, CSE Lab
9	Koteswararao B	Engineer, CSE Lab
10	A Korian	Engineer, EC Lab
11	T.Suryakiran	Administrative Assistant
12	M.Suresh Reddy	Tutor for EC Lab
13	M Sukirthi Vyas	Assistant-Academics
14	G.Muralikrishnan	Library Assistant
15	M. Tiripalu	Assistant (Accounts)
16	D.Sunil	Assistant (F&A)
17	P Naresh	Senior Intern
18	I Ravi Teja	Senior Intern
19	G.Prasuna Oduru	Resident Warden (Girls Hostel)
20	G.Venkaiah	Attender
21	D.Bhaskar	Supervisor-Housekeeping (Operations and Maintenance)
22	B.Suresh	Office Assistant

23	M.Karthik	Intern
24	Supriya Raj	Intern
25	T.G.Kirubakaran	Intern
26	N.Mahesh Babu	Intern
27	T.Suganya	Helper
28	P.Narendra	Technician
29	K.Giri	Electrician
30	K.Muniratnamma	Care taker - Girls Hostel
31	K.Kanakeswara Rao	Plumber

7.4 Consultants

SNo.	Name	Designation
1	Prof.G.V.Chalam	Advisor (Campus Life)
2	G S Yogananda Rao	Outdoor Activities
3	D.Hari Krishnam Raju	Consultant (Procurement & Transportation
4	R.Selvaraju	Project Manager
5	Abhinay Irala	Senior Training and Placement Officer
6	M Michayelu	Training and Placement Officer
7	Dr.A.P.Aruna	Consultant (Research, Innovation and Entrepreneurship)
8	Mr M S Rao	Senior Project Manager

8. Research and Development

Research & Development:

During the period of April 2020 to March 2021, the faculties, along with the PG & UG students and their collaborators have published an impressive number of 25 journal papers. This involves mostly international journal publications such as in Elsevier, IEEE Transactions, Journal of Semiconductor Devices, Solar Energy, Springer, SAE Mobility Engineering and Journal of Business Performance and Supply Chain Modeling. Notably, the faculty members and the students have presented in 19 national and international conferences during this period. Further, 2 Indian patents have been filed during this period.

8.1 Research Publications

Publication in Journals

1. Tripathi D, Edla DR, Bablani A, Shukla AK, Reddy BR. Experimental analysis of machine learning methods for credit score classification. Progress in Artificial Intelligence. 2021 Mar 15:1-27.
2. R.K. Sanodiya and L. Yao, 2021. Discriminative information preservation: A general framework for unsupervised visual Domain Adaptation. Knowledge-Based Systems, 227, p.107158.
3. Agrawal, N. (2021). Dynamic load balancing assisted optimized access control mechanism for Edge-Fog-Cloud network in Internet of Things environment. Concurrency and Computation: Practice and Experience, e6440.
4. Agrawal, N., & Tapaswi, S. (2021). An SDN-Assisted Defense Mechanism for the Shrew DDoS Attack in a Cloud Computing Environment. Journal of Network and Systems Management, 29(2), 1-28."
5. Swalpa Kumar Roy, Juan M. Haut, Mercedes E.Paoletti, Shiv Ram Dubey and Antonio Plaza. Generative Adversarial Minority Oversampling for Spectral-Spatial Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, Feb 2021. (Accepted)
6. Shabbeer Basha, Sravan Kumar Vinakota, Viswanath Pulabaigari, Snehasis Mukherjee and Shiv Ram Dubey. AutoTune: Automatically Tuning Convolutional Neural Networks for Improved Transfer Learning. Neural Networks, 133:112-122, Jan 2021. (Elsevier)
7. Shiv Ram Dubey, Soumendu Chakraborty, Swalpa Kumar Roy, Snehasis Mukherjee, Satish Kumar Singh and Bidyut Baran Chaudhuri. diffGrad: An Optimization Method for Convolutional Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 31(11):4500-4511, Nov 2020.
8. Kancharagunta Kishan Babu and Shiv Ram Dubey. PCSGAN: Perceptual Cyclic-Synthesized Generative Adversarial Networks for Thermal/NIR to Visible Image Transformation. Neurocomputing, 413:41-50, Nov 2020. (Elsevier)
9. Jayendra Kantipudi, Shiv Ram Dubey and Soumendu Chakraborty. Color Channel Perturbation Attacks for Fooling Convolutional Neural Networks and A Defense Against Such Attacks. IEEE Transactions on Artificial Intelligence, 1(2): 181-191, Oct 2020.
10. Shiv Ram Dubey, Swalpa Kumar Roy, Soumendu Chakraborty, Snehasis Mukherjee and Bidyut Baran Chaudhuri. Local Bit-plane Decoded Convolutional Neural Network

Features for Biomedical Image Retrieval. Neural Computing and Applications (NCAA), 32:7539-7551, June 2020. (Springer)
11. Swalpa Kumar Roy, Shiv Ram Dubey, Subhrasankar Chatterjee and Bidyut Baran Chaudhuri. FuSENet: Fused Squeeze-and-Excitation Network for Spectral-Spatial Hyperspectral Image Classification. IET Image Processing, 14(8):1653-1661, June 2020. (IET)"
12. Siva Kotamraju* and Pavan Vudumula, "Improved reverse recovery characteristics obtained in 4H-SiC double-trench superjunction MOSFET with an integrated p-type Schottky diode", IET Circuits, Devices and Systems, Vol.20, Issue 8, pp 1283-1288, Nov.2020
13. M. Sukeerthi and Siva Kotamraju*, "Study of degradation in 3J inverted metamorphic (IMM) solar cell due to irradiation-induced deep level traps and threading dislocations using finite element analysis", Physica E: Low Dimensional Systems and Nanostructures, Vol.127, 114566, March 2021
14. Shathanaa Rajmohan, N Ramasubramanian, Nagi Naganathan, Design Space Exploration for Reducing Cost of Hardware Trojan Detection and Isolation during Architectural Synthesis, Journal of Circuits, Systems and Computers, Vol 30 No. 9 (Published Online), 2021.
15. Chandra Sekhar Vorugunti, Viswanath Pulabaigari, GRK Sai Subrahmanyam, Prerana Mukherjee, ""OSVFuseNet: Online Signature Verification by Feature Fusion and Depth-wise Separable Convolution Based Deep Learning."", Neurocomputing, 409 (2020), 157-172, 2020. [Impact Factor: 4.072]. DOI: https://doi.org/10.1016/j.neucom.2020.05.072 (Date of acceptance: 25 th May 2020). Indexed by SCI.
16. Chandra Sekhar Vorugunti, Viswanath Pulabaigari, Prerana Mukherjee, Abhishek Sharma, "DeepFuseOSV: Online Signature Verification Using Hybrid Feature Fusion and Hybrid Depthwise Separable Convolution Neural Network Architecture", Volume 9, Issue 6, November 2020, p. 259 – 268,Print ISSN 2047-4938, Online ISSN 2047-4946, IET Biometrics, 2020. DOI: 10.1049/iet-bmt.2020.0032 , Impact Factor 2.2 (Date of acceptance: 9 th July 2020). Indexed by SCI.
17. Basha, S.H. Shabbeer, Vinakota, S. K., Pulabaigari, V., Mukherjee, S., & Dubey, S. R. (2020). "AutoTune: Automatically Tuning Convolutional Neural Networks for Improved Transfer Learning." Neural Networks 133 (2021): pp 112-122. (Date of acceptance: 16-October-2020). DOI: https://doi.org/10.1016/j.neunet.2020.10.009 . Indexed by SCI.
18. Basha, S. H., Vinakota, S. K., Dubey, S. R., Pulabaigari, V., & Mukherjee, S. (2020). AutoFCL: Automatically Tuning Fully Connected Layers for Handling Small Dataset Neural Computing and Applications journal, Volume 33, Pages 8055–8065, January 2021, (arXiv preprint arXiv:2001.11951). https://doi.org/10.1007/s00521-020-05549-4 (Date of acceptance: 18-November-2020). Indexed by SCI."
19. Gajjala Viswanatha Reddy, Snehasis Mukherjee, and Mainak Thakur; Measuring photography aesthetics with deep CNNs; IET Image Processing; 14:8 (pp.1561-1570); 2020.
20. A. Sai Charan, M. Jitesh, M. Chowdhury and H. Venkataraman, "ABIN: Attention-based Bi-Directional Modal Fusion Networks for Object Detection at Night Time", IET Electronic Letters, accepted in Oct. 2020, doi:10.149/el.2020.1952

21. PSS Pavan Ganesh and H. Venkataraman, “RF-based Wireless Communication for Shallow Water Networks: Survey and Analysis”, Wireless Personal Communications, Springer, Accepted, October 2020.
22. PSS Pavan Ganesh and H. Venkataraman, “E-CRUSE: Energy-Based Throughput Analysis for Cluster- Based RF Shallow Underwater Communication”, IET Communications, Vol. 14, No. 15, pp. 2544–2553, September 2020.
23. H. Venkataraman and K. Harshini, “Dual Priority: A Real-Time and Integrated Device-and-Network-centric Wireless Network Selection”, IET Communications, Vol. 14, No. 10, pp. 1588 – 1594, June 2020

8.2 Conference Proceedings/Presentations

1. 1. Lushaank Kancherla and Rajendra Prasath, Case Based Reasoning Approaches for Reuse and Adaptation in Community Question Answering System, in: A. K. Luhach et al. (Eds.): ICAICR 2020, Springer CCIS 1393, pp. 1–15, 2021.
2. Sreeja Gaddamidi and Rajendra Prasath, Performance Analysis of Named Entity Recognition approaches on Code-Mixed data, in: Proc. of 6th International Conference Information, Communication & Computing Technology (ICICCT-2021), Springer CCIS Vol.1417, Springer, April 2021 (Accepted - In Press)
3. M. Tiwari, R. K. Sanodiya, J. Mathew, and S. Saha (2021): Multi-source based approach for Visual Domain Adaptation, In International Joint Conference on Neural Networks (IJCNN-2021)(Core ranking: A).
4. Roshan Reddy and Shiv Ram Dubey. On the Performance of Convolutional Neural Networks under High and Low Frequency Information. Fifth IAPR International Conference on Computer Vision & Image Processing (CVIP), India, Dec 2020.
5. Yash Srivastava, Vaishnav Murali and Shiv Ram Dubey. Hard-Mining Loss based Convolutional Neural Network for Face Recognition. Fifth IAPR International Conference on Computer Vision & Image Processing (CVIP), India, Dec 2020. (Best Paper Award)
6. Yash Srivastava, Vaishnav Murali, Shiv Ram Dubey and Snehasis Mukherjee. Visual Question Answering using Deep Learning: A Survey and Performance Analysis. Fifth IAPR International Conference on Computer Vision & Image Processing (CVIP), India, Dec 2020.
7. Chhavi Sharma, Deepesh Bhageria, William Scott, Srinivas PYKL, Amitava Das, Tanmoy Chakraborty, Viswanath Pulabaigari, Bjorn Gamback, ""SemEval-2020 Task 8: Memotion Analysis- The Visuo-Lingual Metaphor!"", COLING -Workshop: The 14th SemEval Workshop on Semantic Evaluation, December 12-13, Barcelona, Spain, 2020. (Indexed by: DBLP) (PDF Link: https://www.aclweb.org/anthology/2020.semeval-1.99.pdf)
8. Chhavi Sharma, Viswanath Pulabaigari, ""A Curious Case of Meme Detection - An Investigative Study"", WEBIST -Conference: The 16th International Conference on Web Information Systems and Technologies, Nov 3 to 5, 2020. (DOI: 10.5220/0010110203270338. Indexed by: Scopus, DBLP, Clarivate, Semantic Scholar, Google Scholar, Microsoft Academic, PDF Link: https://www.scitepress.org/Link.aspx?doi=10.5220/0010110203270338)
9. Chhavi Sharma, Viswanath Pulabaigari, Amitava Das, ""Meme vs. Non-Meme Classification using Visuo-Linguistic Association"", WEBIST -Conference: The 16th

International Conference on Web Information Systems and Technologies, Nov 3 to 5, 2020. (DOI: 0.5220/0010176303530360, Indexed by: Scopus, DBLP, Clarivate, Semantic Scholar, Google Scholar, Microsoft Academic, PDF Link: https://www.scitepress.org/Link.aspx?doi=10.5220/0010176303530360)"

10. Kamal Das, Subhojit Mandal, Mainak Thakur; High Resolution Spatial Mapping of Soil Nutrients Using K-Nearest Neighbor Based CNN Approach; In IGARSS 2020-2020 IEEE International Geoscience and Remote Sensing Symposium (pp. 1102-1105); IEEE
11. J. S. Sunil, M. Sai K., R. V. Prasad and H. Venkataraman, ""Advisory Framework to Interconnect Distributed Water Bodies Targeting Agriculture Farms,"" 2020 10th International Conference on Advanced Computer Information Technologies (ACIT), Deggendorf, Germany, 2020, pp. 863- 866
12. S. Dattprasad, Y.R. VaraPrasad, R. Trestian, H. Nguyen and H. Venkataraman: "CATS: Cluster-Aided Two-Step Approach for Anomaly Detection in Smart Manufacturing", In Proceedings of Springer International Control and Networking Conference (COCONET), Chennai, India, October 2020
13. P. Sree Harshitha, Y.R. VaraPrasad and H. Venkataraman: "CRAWL: Cloud based Real-time interconnections of Agricultural Water sources using LoRa", In 8th Springer Symposium on Control, Automation, Industrial Informatics and Smart Grid Communication, Control and Networking Conference (COCONET), Chennai, India, October 2020
14. A Digital Twin Framework for Predictive Maintenance in Industry 4.0 Authors: Stefan Mihai, William Davis, Dang Viet Hung, Ramona Trestian, Mehmet Karamanoglu, Balbir Barn, Raja Prasad, Hrishikesh Venkataraman, Huan Xuan Nguyen, In: HPCS 2020, 25-29 Jan 2021, Barcelona, Spain (Online Virtual Conference)"
15. S. Dattprasad, Y.R. VaraPrasad, R. Trestian, H. Nguyen and H. Venkataraman, "CATS: Cluster-Aided Two-Step Approach for Anomaly Detection in Smart Manufacturing", In Proceedings of Springer International Control and Networking Conference (COCONET), Chennai, India, October 2020.
16. P. Sree Harshitha, Y.R. VaraPrasad and H. Venkataraman, "CRAWL: Cloud based Real-time interconnections of Agricultural Water sources using LoRa", In Proceedings of Springer International Control and Networking Conference (COCONET), Chennai, India, October 2020.
17. N. Jaswanth, K.P. Anjali and H. Venkataraman, "Perceptual Modelling of Unconstrained Road Traffic Scenarios with Deep Learning", 10th IEEE International Conference on Advanced Computer Information Technologies (ACIT), IEEE, pp. 811-814, Deggendorf, Germany, 16-18 September 2020.
18. J.S. Sunil, S.K. Manasa, Y.R. Vara Prasad and H. Venkataraman, "Advisory Framework to Interconnect Distributed Water Bodies Targeting Agriculture Farms", 10th IEEE Conference on Advanced Computer Information Technologies (ACIT), pp. 863-866, Deggendorf, Germany, 16-18 September 2020.
19. N. Jaswanth, C. Nagpal and H. Venkataraman, "Resource Allocation Complexity Analysis for Relay- based Multihop V2V Communication", IEEE 3rd 5G World Forum (5GWF), IEEE, pp. 199-204, Bangalore, India, 10-12 September 2020.

8.3 On-Going Sponsored Projects (2020-21)

1. Dr. Anish Chand Turlapaty (PI)- Dr. Shiv Ram Dubey, Dr.Balakrishna Gokaraju, The University Of West Alabama (Co-PI)- SERB – CRG-"EMGNet: Development of Deep Learning Based Model for Hand Movements Classification using Surface EMGSignals-Rs.34,06,558-4-Feb-20-3-Feb-22
2. Dr. Shiv Ram Dubey- Taiwanese partner - Prof. Wei-Ta Chu, National Chung Cheng University, Taiwan- GITA -DST –TWN-"Development of Deep Learning based hashing techniques for image retrieval"- Rs.28,28,580 -19 Feb 2020-18 Feb 2023
3. Dr. Hrishikesh Venkataraman- Hella-"Camera-based Lane and Road Boundary Detection during Night-Time Driving"-Rs.16,83,000-13-Jul-18-12-Jul-21
4. Dr. Hrishikesh Venkataraman (PI)- Dr. Raja Vara Prasad Dr. P Viswanath (Co-PI)DST – ICPS-"Sensors, Multi-hopping and Analytics-for real-Time interconnection of village wells (SMART Village Wells)"- Rs.25,00,000-28-Dec-18-27-Dec-21
5. Dr. Hrishikesh Venkataraman (PI), Dr. Raja Vara Prasad(Co-PI)- DST-INT-UK-"Digital Twin Modeling for Automation, Maintenance and Monitoring in Industry 4.0 Smart Factory"- Rs.23,53,344-16-Jul-19-15-Jul-21
6. Dr. Hrishikesh Venkataraman (PI), Dr. S R Pandian, IITDM Kancheepuram (Co-PI)-DRDO-NRB-"Design and Development of Bio-inspired Network of Autonomous Underwater Vehicles"- Rs.46,88,605-7-Feb-20-6-May-22
7. Dr. Raja Vara Prasad Y- MEITY - CC & BT-"Design and Fabrication of Autonomous Passenger Drone"- Rs.36,18,000-26-Jul-19-25-Jul-22
8. Dr. Kadimalla Divyabramham- SERB – ECR-"Development of Hybrid Method to Analyze the Radiation Characteristics of a Dipole Antenna Near a Perfectly Conducting Cylindrically Curved Screen"- Rs.41,40,400-26-Mar-19-25-Mar-22
9. Dr. Priyanka Dwivedi , SERB - SRG,"Development of Wearable, Non-invasive Devices for Human Health Wellness", Rs.30,68,520 26-Dec-20 to Dec. 2022.
10. Dr. Shiv Ram Dubey (PI), Dr. Himanangshu Sarma, DRDO-DYSL AI, "Computer Vision Algorithm for Transformation of Night Time Images to Corresponding Day Time Images", Rs. 9,94,943. 19 May 2020 to 18 May 2021.

8.4 Patents Filing

1. H. Venkataraman and "AnjaliPoornima K, "System and Method to Detect Potholes and Obstacles on Road under Low Illumination", Indian Patent, filed on 19th Nov. 2019.
2. H. Venkataraman and S.V. Jallepalli, "System and Method for Real-Time Control of Speed and Position", Indian Patent, filed on 16th Dec. 2019.

9. Innovation and Entrepreneurship Development

Focus on Innovation and Entrepreneurship: IIIT Sri City promotes a culture of innovation and entrepreneurship to help faculty and students to fulfil their potential and to serve the needs of the community. We foster entrepreneurship and innovation through several ways. IIIT Sri City has been selected by MHRD Innovation Cell to act as an Institute Innovation Council. Furthermore, IIIT Sri City has established an Entrepreneurship Cell (E-cell) to support and enable students to create innovative ideas and convert them into business opportunities. E-cell trains students on how to be successful entrepreneurs with social responsibility.

Keeping up with the spirit of entrepreneurship, in 2020, we launched our TBI, Gyan Circle Ventures (The legal entity being Centre for Innovation and Entrepreneurship Development at IIITS (CIED), an independent Section 8 Non-profit organization). The Business Incubator is one of the strategic priorities of the institute to promote innovation and entrepreneurship in the region, in several areas including but not limited to, Infrastructure Development and Smart Manufacturing. We strongly believe that Gyan Circle Ventures will serve as a hub for innovation and startups leading to development of new technologies and business opportunities as well as enable economic and social development in the region.

The primary purpose of the incubator, associated with the esteemed IIIT Sri City, is to encourage building the institutions' entrepreneurial spirit via utilizing its intellectual capital. Currently, Dr. G. Kannabiran, Director, IIIT Sri City and Shri M Balasubramaniam, Chairman, BoG-IIIT Sri City serve as the Directors of the company (CIEDI).

Gyan Circle Ventures located in IIIT Sri City provides valuable facilities to incubatees and startups. The incubatees of GCV gets access to

- Modern work space
- Communication facilities
- Computing facilities
- Equipment labs
- Library & information Centre
- Training and conference facilities

In addition, the incubatees can leverage the expertise of Mentors from both academia and the industry. Being an incubatee in a TBI which is a part of an esteemed high quality technical institution has additional perks. Startups need manpower and they have an opportunity to hire brilliant young minds from IIIT Sri City, either as interns or as full time employees.

Gyan Circle Ventures proposal to function as a Technology Incubation and Development of Entrepreneurs (TIDE 2.0) incubation centre was approved by the Ministry of Information Technology (MeiTy). They have chosen and are funding GCV as a Group 2 Centre.

TIDE 2.0 by MeiTy was initiated to promote tech entrepreneurship through financial and technical support to incubators engaged in using emerging technologies such as IoT, AI, Block-chain, Robotics etc. in pre-identified areas of societal relevance.

The TIDE 2.0 center at Gyan Circle Ventures will provide support for innovators and startups, in various phases, via the two following programs.

Entrepreneur-In-Residence (EiR) Program

- An Entrepreneurs-in-Residence (EiR) is an individual(s)/ student(s)/ start-up who are ready to develop and validate their idea into a Proof-of-Concept (POC).
- They will work from GCV incubator space
- GCV TBI will support the idea development, validation and subsequent development of POC.
- A maximum up to Rs. 4 Lakhs will be provided to each EiR as Grant.

Grants Program

- Nascent start-ups with a definite Proof-of-Concept can be considered eligible for the grant. The grant is provided to create a Minimum Viable Product and to advance the start-up till Go-to-market stage.
- A maximum of up to Rs. 7 Lakhs may be provided to each start-up as Grant.
- GCV TBI will provide mentorship and guidance throughout the program.

As a part of it's 1st Cohort under MeitY TIDE 2.0 programme, GCV selected & funded 9 startups (8 Grants & 1 EiR) during the FY2020-21. The details of the startups are as follows:

SNo.	Startup/Company	Lead Innovator/CEO	Innovation Brief	Technologies	Application Domain
1	Rekindle Automations Pvt Ltd, Chennai	Radhakrishnan Jothiram	A Smart Intravenous Dripper System For Centralized Monitoring And Automatic Stopping Of Intravenous Fluid	AI	HealthCare
2	Hivericks Technologies, Chennai	Hemalatha R	Next Generation Of Smart Green Charging Solutions For Li-Ion Battery Devices	IoT	Smart Charging
3	Aqua Solutions, Krishna	Jogi Sai Prasanna	Aquaculture Smart Monitoring Systems for feeding & surveillance of aqua farms	IoT	Aquaculture
4	LSPoT PrevenTech, Erode	Sunil Vignesh	Intelligent Wearable Device to Retain and Maintain Human Posture	ML	Preventive HealthCare
5	MedCuore Medical Solutions, Chennai	Paul Pradeep J	Indoor Air Quality Monitoring and Purifying System using Hybrid Green Technology	IoT	Environment

6	Nandha Infotech, Coimbatore	Vigneshwaran T	SenSe Luto – Advanced Soil Monitoring & Crop Management System	IoT	Agriculture
7	Mellon Ai Pvt Ltd	Dr Masood Ikram	Capemo; Artificial Intelligent Camera	AI	Retail
8	EQUIZONE MEDITECH PRIVATE LIMITED	Rajanandhini. B	Negative Pressure Wound Therapy with Remote Monitoring	IoT	HealthCare
9	Hydrotribe Pvt Ltd	Tarun K Karanam	Automated and self Sustainable Aeroponic tower to cultivate organic vegetables at home	IoT	Hydroponics

10. Other activities:

Academic progress during COVID-19: As per the advisories of the Government of India and Government of Andhra Pradesh, the campus is closed for the BTech students. The spring 2020 classes were resumed through online mode from January 2021 as per the regular schedule. Faculty members were requested to provide the teaching slides relating to their classes one week in advance and the same were shared with the students through a common drive. Further, all the classes were video recoded and the recordings were made available for off-line watching by students. In order to ensure student participation in the classes on-line surprise quizzes are conducted every week which form part of continuous assessment.

Continuous assessment components and end term examinations are being conducted through online mode. Based on the number of students, multiple question papers are set and are sent to the students through email. Scanned copies of the answer sheets were uploaded by the students through Google drive within stipulated time. For each subject, viva examination was conducted in order to ensure that students are not able to secure marks through unfair practices, if any. The institute adopted, “Parents as Proctors” approach by requesting the parents to provide right environment for the remote examination and to ensure discipline during the remote exams. The academic activities of spring 2021 have continued in the online mode with further improvements in the processes.

Periodic meetings were conducted with the Class Committee members and steps were taken to ensure the effectiveness of teaching-learning process is not affected. Faculty members are in touch with the students through the mentoring programme (IMPACT), already in place in for 3rd and 4th year students. A 24x7 helpline was in place to provide information and support to the students. The institute places on record the support of the faculty members for effectively transitioning to online delivery and assessment of the courses.

The PhD and MTech students continue to stay on campus since November 2020. MTech classes are conducted in regular mode as per the schedule. PhD students and JRFs are attending the institute as per regular office hours. These students are provided accommodation in the rented

flats with each of them having rooms with attached bathrooms. Students have been asked to follow the COVID-19 guidelines strictly.

Industry participation in PhD Programmes- With a view to achieve industry oriented research and to improve industry collaboration, the institute is taking up the following in the PhD programme: (1) *Industry experts as part of the PhD student selection Committees:* Industry experts will be part of the panel of selecting PhD students. The experts are able to check the understanding of the state of the art research relevant to industry and to judge the potential of the students, (2) *Industry experts as part of Doctoral Committee (DC):* It is proposed to have an industry expert as part of the DC who will ensure that the research work carried out by the students are in line with the current state of the research relevant to the industry and (3) *Industry experts as Co-guide /Co Supervisor of PhD students:* In order to significantly improve the industry-quotient in research carried out by PhD students, industry experts serve as co-guide to the PhD students, thus the value of industry experts is consistently available during the entire period of PhD programme. It also leads to further ownership to the industry experts to make the student to solve industry problems. It also provides opportunities for the students to take up internships under the mentorship of such co-guides from the industry.

Addition of New faculty Members: As of May 2020, the institute had a total strength of about 850 students in the BTech programmes. The Institute has 19 faculty members and about 10 visiting faculty members. In order to significantly advance the teaching-learning process, it was proposed to systematically improve the Faculty-Student Ratio (FSR) over the next two years**.** Associate Professors and Assistant Professors were recruited to improve the FSR. Accordingly, the total number of faculty members has increased to 26 as of December 2020.

Creation of Programme Advisory Groups: In addition to MTech programme in AI &ML, the institute has planned to launch two MTech programmes in the areas including Cyber Security, Smart Manufacturing. These programmes are focused in emerging areas and critical inputs are required from industry and leading institutions from India and abroad. It is proposed to form Programme Advisory Group (PAG) for intensive interaction for preparing the curriculum. The PAGs shall also help to review and plan BTech specializations in thematic areas. As per this, the PAG for AI & ML domain shall have experts including Ms. Shalini Kapoor IBM Fellow, Dr. Manish Gupta Director Google Research, Dr. Balaraman Ravindran IIT Madras and Dr. S. Venkatesh Innovation Labs TCS Chennai.

Sponsored research project since January 2020: The following sponsored projects were received by the faculty members since January 2020.

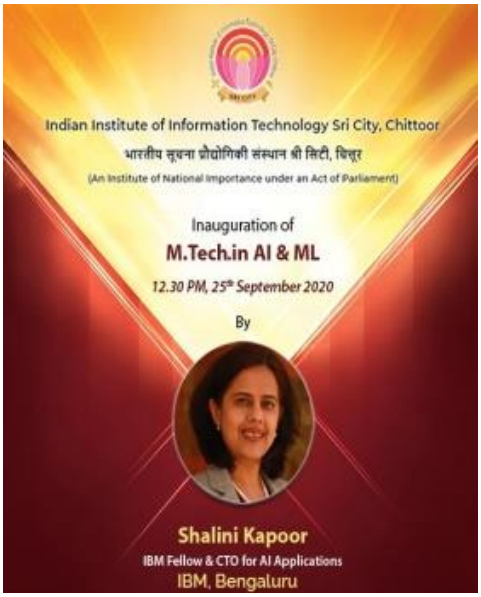
No.	Title	Funding Agency	PI	Duration	Amount (Rs) in Lakhs
1	Development of Deep Learning based Hashing Techniques for Image Retrieval	Global Innovation and Technology Alliance (GITA), Dept. of Science &	**Indian PI:** Dr. Shiv Ram Dubey **Taiwan PI:** Dr. Wei-Ta Chu	2020– 2023 (3 years)	**28.28**

		Technology			
2	Computer Vision Algorithm for Transformation of Night Time Images to Corresponding Day Time Images	DRDO Young Scientist Lab Artificial Intelligence (DYSL-AI)	Dr. Shiv Ram Dubey (PI) and Dr. Himangshu Sarma (Co-PI)	2020 – 2021 (1 year)	**9.8**
3	EMGNet: Development of Deep Learning Based Model for Hand Movements Classification using Surface EMG Signals	Core Research Grant, Dept. of Science and Technology	Dr. Anish Chand Turlapaty (PI) and Dr. Shiv Ram Dubey (Co-PI)	2020 – 2022 (2 years)	**34.06**
4	Design and Development of Bio-Inspired Autonomous Underwater Vehicles	Naval Research Board (NRB)	Dr. Hrishikesh Venkataraman (PI)	2022 – 2022 (27 months)	**46.88**
5	Development of Wearable Non-Invasive Devices for Human Health Wellness	Dept. of Science and Technology	Dr. Priyanka Dwivedi	2020-2022 (2 years)	**30.00**
Total Value					**148.00**

Faculty Development Programme on E-Content Development – 15-19 June 2020: The institute organized a 5-day programme on behalf of IIIT Coordination Forum to prepare faculty of IIITs for on-line teaching during 15-19 June 2020 with faculty support from NITTTR Chennai. The programme is attended by 160 faculty members from 22 IIITs from all over the country. This programme was aimed at providing the knowledge and skills for teachers to cater to present day learners and their learning styles. After completing the learning tasks in this course, the participants were able to explore the teaching principles as per Blooms Taxonomy and design learning spaces in four quadrant approach, design an effective lesson utilizing instructional technology resources and integrate into the teaching environment, explore online Free and Open Source Software [FOSS], Open Educational Resource (OER) and other digital tools for the creating effective learning environment and design of different formative and summative assessment strategies for a technology enabled instruction.

Shri. Rakesh Ranjan, Additional Secretary, MHRD inaugurated the programme and noted the advancements in technology and the plethora of powerful and innovative digital devices and tools have a great potential to improve educational outcomes. Prof. VSS Kumar, Chairman Board of Governors of NITTTR Chennai, the guest of Honour highlighted that educators must understand that the use of digital content and devices will improve teaching and learning and thus enhance educational opportunities and benefit the Millennial.

Launch of MTech programme in AI & ML on 25 September, 2020: The institute has successfully launched the MTech Programme in AI &ML to bridge the urgent needs of talented scientists and engineers in the industry. The Programme has a strong emphasis on industrial projects under the mentorship of leading experts in the field of AI & ML. The 64-credit curriculum has core courses of AI & ML and few application areas including computer vision, reinforcement learning, natural language processing, robotic automation, etc. MTech in AI&ML aims to bridge the urgent needs of the industry and to produce the high-end AIML scientists and engineers for the society. The aim of the MTech-AIML program is to produce graduates by providing a rigorous training in the priority areas of Artificial Intelligence and Machine Learning. The MTech in AIML strengthens the students such that they can become AIML experts to support the AI journey of the country.



Inauguration of TBI by Hon. Minister for Education, Government of India - 8 October, 2020 The institute has established the Technology Business Incubator- Gyan Circle Ventures (Legal Entity-Centre for Innovation and Development of Entrepreneurship at IIITS) as a Section 8 Company to promote innovation and entrepreneurship in the region. IIIT Sri City has been selected as a Group 2 Center (G2C) under TIDE 2.0 scheme of MeitY Startup Hub (MSH) programme with an initial funding of Rs. 3.2 Crores for 5 years. GCV shall enable a large number of aspiring entrepreneurs and students to build high-quality startups. The center was inaugurated on 5th of October 2020 Dr. Ramesh Pokhriyal Nishank, Hon'ble Union Minister of Education. The programme was graced by Shri. Ajay Prakash Sawhney, Secretary, MeitY and Shri. Amit Khare, Secretary, Ministry of Education Government of India. The center is planned to promote startups in areas including Smart Manufacturing, Healthcare, Education, Agriculture, Financial digital payments, etc. The inauguration was graced by Shri. M. Balasubramaniam Chairman, Board of Governors and Shri. Srinivasa Raju, Member of BoG, representing industry partners.

FICCI-Panel discussion with Industry Leaders- The institute organized of a Round Table with industry led by FICCI on 10th October 2020 on behalf of IIIT Coordination Forum. This session was attended by Directors and senior faculty of all IIITs. The discussion covered the following areas-

- Impact of COVID on Tech companies, new job requirements
- Expectations of skills and competences (Cloud, Cyber Security, Analytics)
- How do we create sustainable engagements, what are some best practices?
- Industry relevant research through research & innovation eco-systems
- Internationalization of Education

The speakers included- Dr. Gautam Shroff, Sr. VP & Head, TCS Research Mr. Rajiv Arora, Regional CIO, Siemens Mr. Neel Bhatia, Director APAC Region, Intel Mr. Hemal Shah, Sr. VP & Reg. CIO-Asia Pac, Dell Mr. Amit Mehta, Head- Education & Training, AWS Mr. Mayank Kumar, Co-founder & MD, upGrad Mr. Ajay Bohora, Co-founder, HDFC-Credila Financial. The session was moderated by Ms. Shobha Mishra Ghosh, Assistant Secretary General, FICCI.

AICTE ATAL Sponsored FDP – 2-6 November 2020: A programme on "Natural Language Processing using Deep Learning" from November 2 to 6, 2020. Natural language processing (NLP) is an important field of Artificial Intelligence and Linguistics. It involves intelligent analysis of written text. Participants of this FDP learnt theory like sequence to sequence models, viz., recurrent neural networks, long-short-term-memory models, and representations like word to vector (word2vec) representation etc. They also learnt practical implementation techniques. Resource persons are from IITs like IIT Kharagpur, IIT Tirupati, IIT Guwahati and from Industry like Wipro AI Labs. The FDP, coordinated by Prof. P. Viswanath, was attended by 44 faculty members and research scholars from various institutions.

Student Induction Programme 2020: A total of 315 BTech students were admitted in 2020-21. The institute hosted the virtual induction programme from 02 - 05th December 2020. Shri. Josh Foulger, Country Head and MD, Foxconn International Holding inaugurated the programme. Shri. M. Balasubramaniam, Chairman Board of Governors delivered a special address and highlighted the changes in technology trends. Shri. Srinivasa Raju, representing the Industry Partner of IIIT Sri City motivated the students and advised the students to set career and life goals, and pursue them with hard work and commitment. A team of faculties of the institution enlightened about the academic, co-curricular & extra-curricular activities as well as prospective

scope of the domain that they had opted for. In addition, sessions on Yoga, health eating, innovation & entrepreneurship, gender sensitivity, personal safety, alumni experiences, anti-ragging, etc. Students enthusiastically participated and had virtually tour of the campus.

UKIERI Mobility programme: The Indian Institute of Information Technology Sri City and Edinburgh Napier University UK is being funded by UKIERI (UK-Indian Education Research Initiative) and British Council of India for the Virtual Mobility Program 2021. This is part of GBP 43000 grant to the universities for a Physical Mobility Program to be conducted in the near future. This primary objective is to collaborate in technical teaching and to synergize faculty technical strength from the UK with faculty from India. The secondary objective of our virtual mobility programs is to plan for research group meetings among faculty of both institutes in the chosen areas of strength for both the institutes. The final objective is to enhance cultural understanding of students from the UK and India remotely. As a part of this Virtual Mobility Program, the 3rd or 4th year undergraduate CSE students are collaborating together to form project groups and plan to work the whole semester from January 2021 to April 2021. The companies Swiggy, Flutura, and E&Y are happy to participate in the programme as industry partners to provide problem statements and act as clients to the student groups. The student teams will be working in the following areas: AI/ML Computer Vision, Natural Language Processing, and Cyber Security, and 5G Communications.

Inauguration of UKIERI Virtual Mobility programme : 8 February, 2021: Indian Institute of Information Technology Sri City and Edinburgh Napier University UK is being funded by UKIERI (UK-Indian Education Research Initiative) and British Council of India for the Virtual Mobility Program 2021. This is part of GBP 43000 grant to the universities for a Physical Mobility Program to be conducted in the near future. Due to COVID-19, the programme is modified as a Virtual Mobility Program in which 3rd or 4th year undergraduate CSE/ECE students are collaborating together to form project groups and plan to work the whole semester from January 2021 to April 2021. The companies Swiggy, Flutura, and E&Y are happy to participate in the programme as industry partners to provide problem statements and act as clients to the student groups. The student teams will be working in the following areas: AI/ML Computer Vision, Natural Language Processing, and Cyber Security, and 5G Communications. The programme was launched by Dr. Gargi B Dasgupta, Director, IBM Research India and CTO, IBM India and South Asia. Mr. M. Balasubramaniam, Chairman Board of Governors virtually graced the occasion.

Student Achievements in global competition: Google Summer of Code is a global program, by Google, focused on bringing more student developers into open source software development. Students work with an open source organization on a 12 week programming project during their break from university and earn a stipend for the same. The following students won the competition:

he following students won the competition:
1) Shubham Bhagat
2) Sayam Kumar
3) Raahul Singh
4) Aman Gupta
5) Ajit Jadhav
6) Harshitha Chowdary

Future Bright Innovators-Orientation for School Students: The primary objective of the FBI program is to provide a preview to Computer Science & Engineering and Electronics & Communication and encourage creativity and innovations among students. It also provides an opportunity for students of various schools to stay together for fun-filled days at the state of the art campus of IIIT Sri City. In 2019, IIIT Sri City organized a 3-day camp in which about 40 students from various schools from Chennai, Bangalore and Nellore participated in the camp. Given the high interest in the 2019 the institute decided to continue to engage with school children and schools. In 2020 instead, due to the Corona Pandemic, the institute conducted the webinar program (instead of the summer camp) as a part of the Future Bright Innovator Program Series, the webinar was titled "Technology Trends in CSE and ECE - Career and Higher Studies Opportunities". The webinar was conducted on Saturday, 30th May 2020. Around 100 students participated in the program. Along with the Director, five faculty members from the institute (Dr. Balaji Raman, Dr. Shiv Ram Dubey, Dr. H. V. Raman, and Dr. Priyanka Dwivedi) participated in the program and spoke. The participants appreciated the time the institute took in organizing this seminar and the interaction that happened between the faculty members. Faculty of IIIT Sri City got a glimpse of the future students, who showed great eagerness to learn, who exhibited tremendous energy in their actions, who displayed the spirit of competition. It is indeed exciting to teach and train these future bright innovators.

MoU with AP Police: The institute has signed a MoU with AP Police to establish a Centre of Excellence in "Autonomous Security & Smart Traffic Management", which shall act as a knowledge center for technological advancements to support the Police department. The expenditure for setting up would be as decided jointly by both the parties through MoA within the overall scope of the MoU. It is envisaged to take up research leading to state of the solutions using AL/ML, UAV& Robotics, Wireless communications, etc. to support AP Police. The CoE shall also focus on training and development of police personnel of AP State. The MoU was signed by Prof G. Kannabiran and Shri. D.Gautam Sawang, IPS DGP of AP State in the presence of Mr. M. Balasubramaniam, Chairman, Board of Governors.

Lecture series on Industry Applications of AI & ML: The institute started offering MTech Programme in AI &ML to bridge the gap for talented scientists and engineers in the industry. In addition, the institute offers BTech specialization in AI &ML. with a view to expose the students on industry applications, a lecture series was organized from 30th Jan 2021 to 7th March 2021

A total of 12 experts from leading organizations such as IBM, TCS, Flutura, Intel, Microsoft, Jio AI, Swiggy, Sprinklr, Ericsson etc. delivered talks with focus on practical applications of AI. The topics ranged from The topics ranged from Time series analysis for fault detection & localization in real world systems, Reinforcement Learning for trading in electricity markets, AI Infusion patterns in Industry, Case study on a Manufacturing Application, Managing Buildings and Energy optimization, AI in Retail, AI in industry using Watson and many more.

Launch of OBE implementation: In a major academic transformation, the institute has decided to implement Outcome-based Education (OBE) from 2021-22 academic year through a systematic approach. It is proposed to achieve effectiveness of the teaching-learning process by ensuring student-centeredness in all our activities. Therefore, the curriculum and its delivery shall eventually be helping the students to be able to get right jobs or take up higher studies. The OBE implementation was initiated with couple of orientation sessions by IIT Madras and NIT Trichy. While the sessions by Prof Pramod Mehta (IITM) focused on the need for OBE, Prof. N. Kumaresan and his team (NITT) explained the methodological approach for OBE implementation. Mr. M. Balasubramaniam, Chairman, Board of Governors inaugurated the activities relating to OBE implementation. In addition to sessions by external resource persons, internal discussions are being held towards preparation for OBE implementation.

International Workshop on Deep Learning and Applications, 22-26 February 2021: An International Workshop on Advances in Deep Learning and Applications was organized by the institute during 22-26 February 2021 in online mode. Mr. M. Balasubramaniam Chairman BoG inaugurated the workshop. There were 64 participants, including 11 Faculties, 41 Research Scholars and 12 Master Students from the premier institutes. The workshop has witnessed 17 speakers who are the experts in the area, including key resource persons as Prof. Wei-Ta Chu from National Cheng Kung University, Taiwan, Prof. R. Venkatesh Babu from IISc Bangalore, Prof. Sumantra Dutta Roy from IIT Delhi, Prof. Ram Bilas Pachori from IIT Indore, Dr. Vineeth N Balasubramanian from IIT Hyderabad, Mr. Anoop Katti, ML Scientist from Amazon Berlin, Germany, and Mr. Smit Marvaniya, Advisory Research Engineer from IBM Research Bangalore. Wide range of topics were covered during the workshop, including fundamentals of machine learning, pre-deep learning essentials, introduction to neural networks and multilayer perceptron, convolutional neural networks, generative adversarial networks, recurrent neural networks, deep learning with limited data, adversarial robustness, different applications of deep learning along with the hands-on sessions. The efforts of Dr. *Shiv Ram Dubey* and *Dr. Rakesh Kumar Sanodiya* for coordinating the workshop deserve appreciation.

Launch of Computer training for rural School Children: The institute has adopted five villages in 2018 under Unnat Bharat Abhiyan, a flagship programme of Ministry of Education, Govt. of India, to enable participating higher educational institutions to work with people of rural India in identifying the development challenges and evolving appropriate solutions for accelerating sustainable growth. It was proposed to create opportunity for school children for additional learning. It was identified that sustained engagement with the school children through few related activities might help their growth. On the occasion of 72nd Republic Day, the institute inaugurated the first activity of computer training to school children. A total of 40 students from different villages participated in the session. The students are given training about the learning apps and e-education. The students are given personal system to use along with the training.

Various lectures are arranged on computer tools such as Microsoft word, Excel, PowerPoint's, internet etc. Basic hardware information also provides to students to understand the parts of the computer. At the end of the session a small quiz conducted to measure the learning effectiveness. It is proposed to add other developmental activities to support school children.

National Road Safety month March 2021: During this month, various activities were conducted to create awareness of safe driving and traffic rules in the local areas. Basic Life Support training was given to IIITS employees. They participated in Basic Life Supports Camp and learned Cardiopulmonary resuscitation (CPR) conducted by a team doctors. A painting competition for school students was organized on the theme "Road Safety awareness". More than competition 100 school students had actively participated and their message for road safety through their paintings. Road Safety awareness campaign was organised with the support of Sri City Hitech Police and Security. During the campaign people who were not wearing helmets, not wearing seat belts or speaking over the mobile while driving have been stopped and briefed about the danger that may cause due to their negligence.

International Women's Day Celebrations – 7 & 8 March, 2021: IIIT Sri City celebrated International women's day by conducting a series of online events for two days on 7th and 8th March 2021.This year the women's day theme was *Women: New Hope for Emerging Bharat*. As the workforce of women in India has seen a gradual increase in all the levels, it is noteworthy to mention that Women are a new hope for Emerging Bharat. The event was conducted online and it included talks from eminent ladies from various fields who with their words motivated and guided the students. Mr. M. Balasubramaniam Chairman BoG inaugurated the programme. The guests for the events were: Shalini Kapoor, IBM Fellow AI, Director & CTO India, IBM, Member BoG IIITS, Shankari, Scientist-F & Project Director, DRDO, Aruna Schwarz, co-founder & CEO, Stelae Technologies, Lt Cdr. Niati Hirway, Armed Force Officer, Dr. Kalapriya Kannan, Master Technologist, Hewlett Packard Enterprise, Chandni Chandran, IAS, SDM, Kanchanpur, North Tripura, Dr. G. Swarnamalya, Classical Dancer and Actor, Faculty at Krea University. Online games and activities marked the occasion.

Release of Grants to Startups : The institute has established the Technology Business Incubator- Gyan Circle Ventures (Legal Entity-Centre for Innovation and Development of Entrepreneurship at IIITS) as a Section 8 Company to promote innovation and entrepreneurship

in the region. IIIT Sri City has been selected as a Group 2 Center (G2C) under TIDE 2.0 scheme of MeitY Startup Hub (MSH) programme with an initial funding of Rs. 3.1 Crores for 5 years. This fund is to support potential startups (a) Entrepreneurs in Residences (Scope: Idea to Proof of Concept), (b) Startup Grants (Scope: Proof of Concept to Minimum Viable Product) with a funding of Rs.4 lakhs and Rs.7 lakhs respectively.

GCV received Rs. 24.80 Lakhs in 2020-21 as the first installment from MeitY. In Cohort-I, 8 Startups and 1 EiR were selected and the first installment of grants was provided to them in March 2021. Application areas include Healthcare, Agriculture, Environment, Retail, Aquaculture, Energy, etc. The subsequent installments have to be provided to these grantees as per the attainment of stated milestones. Being the first set of grants, Chairman Mr. M. Balasubramaniam and Industry Partner Mr. Ravi Sannareddy participated on the occasion and handed over the grant awards to the startups. In addition to supporting startups, it is proposed to take up activities to promote innovation and entrepreneurship in the region. It is further proposed to garner CSR funds from large corporates for providing seed fund support to Startups having MVP and ready to go to market.

Handing over the grant documents to the Startups at MSME-Development Institute, Chennai on 6th March 2021

Indian Institute of Information Technology (IIIT), Sri City has selected nine start-ups in various spheres of activity for grants to take forward their ideas under Gyan Circle Ventures, the Technology Business Incubator (TBI) of the institute.

A start-up using the artificial intelligence to develop an intravenous drip system for centralised monitoring and automatic stopping of intravenous fluid; a start up using IoT to develop smart green charging solution for Li-Ion battery devices; an aquaculture start up using IoT smart monitoring system for feeding and surveillance of aqua farms; a healthcare start-up using machine learning to develop an intelligent wearable device to

retain and maintain human posture; an environment-based start-up using IoT to develop an indoor air quality monitoring and purifying system using hybrid green technology and a start-up using IoT to develop advanced soil monitoring and crop management system, are the beneficiaries.

Institute director G. Kannabiran said 50 applications were received and evaluated through a two-stage process based on the potential to develop a minimum viable product within a year. The selected start-ups were leveraging emerging technologies to develop solutions. Each start-up would be provided with ₹7 lakh, product development support, mentoring by a team of domain experts and business consultants. The beneficiaries will be interacting with 200 companies located in the campus as well, he said.

M. Balasubramaniam, chairman of the Board of Governors of the Institute, handed over the grant documents on Saturday. The start-up ecosystem had seen a tremendous growth during COVID-19, he said.

“The numbers of innovations have grown so much that the total numbers of innovations of three years have been achieved in six months. I am sure that the selected startups will grow and become unicorns of the country. We will connect the start-ups funded by Gyan Circle Ventures to various funding opportunities through venture capitalists and angel investors,” he added.

11. Summary of Financials

INCOME & EXPENDITURE STATEMENTS(YOY)

Rs.in Lakhs

INCOME	2016-17	2017-18	2018-19	2019-20	2020-21
Academic Receipts	798.29	1213.42	1701.93	2233.14	2440.46
Grants / Subsidies	100.00	300.00	-	-	183.00
Income From Investments	143.20	78.77	104.39	204.73	279.05
Interest Earned(Other than FD)	-	36.18	0.40	2.75	0.82
Other Income	105.18	151.59	226.98	351.67	133.81
TOTAL(A)	**1,146.67**	**1779.96**	**2033.70**	**2792.29**	**3037.14**
EXPENDITURE					
Staff Payments & Benefits (Establishment Expenses)	270.02	422.32	521.40	489.32	569.26
Academic Expenses	279.14	445.06	393.09	417.74	177.20
Administrative and General Expenses	297.82	540.53	395.14	355.75	229.87
Transportation Expenses	69.40	123.90	52.99	47.10	2.07
Repairs & Maintenance	53.05	75.04	60.48	87.76	81.69
Depreciation	79.75	100.93	270.97	270.74	268.57
Prior Period Expenses	5.56	39.63	3.68	48.34	16.02
TOTAL(B)	**1,054.74**	**1747.41**	**1697.75**	**1716.75**	**1344.68**
Excess of Income over Expenditure(A-B)	**91.93**	**32.55**	**335.95**	**1075.54**	**1692.46**