



St. Clare College

Affiliated to Bangalore University | A Claretian Missionary Institution

NURTURING VALUES AND EXCELLENCE

Department of Sciences

Annual Report for the Academic Year 2020 – 21

The advancements in the field of Science and Technology explore immense opportunities for the benefit of mankind. Department of Sciences focuses on the holistic development of students by offering them an encouraging, innovative and professional ambience. The department fosters excellence among the students by conducting various events on par with current industry trends. The department started its journey in 2007. Currently, the department consists of nearly 311 students, 8 faculty members and 1 lab assistant. The annual report summarizes the various events and accomplishments of the Department of Sciences during the academic year 2020 – 21.

Commencement of BSc-MSC and BSc-PJC

During the academic year 2020 – 21, the department commenced BSc-MSC (Mathematics, Statistics and Computer Science) and BSc-PJC, programmes affiliated with Bangalore University, to generate proficient graduates in the respective fields.

Add-on Programmes

- Add on programme on ‘Office Automation Tools’, for the selected students of all the batches of BCA and BSc, from 23/11/2020 to 12/01/2021.
- Add on Programme on Training for Competitive Examination “COMPETE”, for the selected students of all the batches of BCA and BSc from 07/12/2020 to 22/05/2021.
- Add on programme on ‘Cryptography and Network Security’, for 3rd year BCA from 01/07/2021 to 06/08/2021.
- Add on programmes on ‘Basic R-Software’, for all the statistics students of 1st, 2nd and 3rd year BSc students from 15/07/2021 to 31/07/2021.

Guest Lectures/Technical Talks/Alumni Talks

Sl. No.	Date	Title	Resource Person(s)	Beneficiaries (Students)
1	05/09/2020	Student Start-up and Entrepreneurship	Dr Saji Varghese, Entrepreneur and Associate Professor, Department of English, Christ University, Bangalore	2 nd year BCA 3 rd year BCA
2	14/09/2020	Interactive session on 'A new look to Mathematics'	Dr S B Satyanaryana, Department of Mathematics, Vijaya College, Bangalore	2 nd year BSc 3 rd year BSc
3	14/09/2020	Interactive Session on 'Statistical tools for Research'	Dr Mohini Bhat, HoD, Department of Management, Christ Academy Institute of Advanced Studies, Bengaluru	2 nd year BSc 3 rd year BSc
4	22/09/2020	Environment Sustainability and Water Conservation: A Virtual Expert Talk on – Life Beyond Water	Dr ChandrimaGoswami, Guest Faculty [School of Environmental Studies, Jadavpur University, Kolkata and Dept. of Environmental Studies, RabindraBharati University, Kolkata]	2 nd year BCA 3 rd year BCA
5	23/09/2020	Career in Data Science- Tableau the Game Changer	Mr JubinThomas, Business Analyst(Intern), Colgate(Palmolive), Dublin, Ireland, (Alumnus 2013 – 16 batch)	3 rd year BCA
6	25/09/2020	Special Talk on 'Calculus of Variation'	Dr T.G. Sudha, Assistant Professor, Department of Mathematics, Government Science College Autonomous, Bangalore.	2 nd year BSc 3 rd year BSc
7	3/10/2020	Expert talk on Importance of Job Interviews	Mr T.K Rajiv, Director, Suprajiv technical and management studies Pvt. Ltd.	1 st year BSc 2 nd year BSc 3 rd year BSc

8	7 /11/2020	Interactive Webinar On Golden Paths of Nobel Laureates	Dr Jose James, Assistant Professor (Stage II) Postgraduate & research department of chemistry, St. Joseph's College, Moolamattom, Kerala	1 st year BSc 2 nd year BSc 3 rd year BSc
9	6/03/2021	'EQUAL' or 'UNIQUE':What is your choice?'	Ms Nanditha Shankar Goud, Consultant-Mentor Trainer Social& Behavioural Facilitator Counsellor	All the girl students of the BCA & BSc batch
10	15/05/2021	Know Your Employer - Career Opportunities in an IT Perspective	1. Mr Akhil P Nair, Senior Compliance Associate, Amazon India Private Limited, Bangalore Alumnus of Batch 2017-20 2. Mr Isacc Stewart W, Data Engineer – Global Finance and IT Strategy, L&T Infotech Limited, Bangalore Alumnus of Batch 2017-20	3 rd Year BCA
11	29/05/2021	Data Science and its Opportunities	Mr Vishnu A P(Alumnus 2011-14), Senior Software Engineer, Nous Infosolutions	2 nd year BCA
12	16/06/2021	Human Capital and Design Thinking	Prof.Dr.WorakamalWistsri, King Mangkutus University of Technology, Bangkok,Thiland	1 st year BSc 2 nd year BSc 3 rd year BSc 1 st year BCA 2 nd year BCA 3 rd year BCA

Career Counselling/Soft Skill Development Sessions

- Student Enrichment Program on ‘Career in SAP’ for all the students of BCA and BSc, on 21/11/2019. Mr NareshBabu G S, CISA, SAP GRC Consultant, SAP Solution Delivery Center, SAP India Pvt. Ltd., Bangalore was the resource person.
- Career-oriented session on ‘Intellectual Property: A value addition on the Career of Science Stream’, for all the students of BSc, on 28/11/2020. Mr.B. VivekAnandSagar, IP Attorney and Project Associate, Patent Information Centre, KSCST and Dr SarasijaPadmanabhan, Patent agent, IP Prior Art Search Specialist, Bangalore, Advisory Member of PIC, KSCST were the invited resource persons.
- Capacity Building and Skill Enhancement Workshop on ‘Soft Skills’, via online mode, for 1st year BCA, from 12/10/2020 to 22/10/2020. Ms Renuka C, Certified Life Skills and Positive Psychology Coach & Certified Counsellor and Graphologist was the resource person.
- Workshop on ‘Importance of Professional Behaviour in Corporate Workplace’, via online mode for all the students of BSc, from 16/10/2020 to 17/10/2021 by Ms LindaAdens, Branding and Advertising Associate at Zee Entertainment Ltd, Bangalore was the resource person.
- Capability Enhancement & Professional Development Workshop on Career Navigation: Corporate or Post Graduation Study, in virtual mode, for all the advanced learners of all the batches of BSc and BCA on 05/06/2021. Ms AshikaUnni Krishnan(Alumnus 2017-20), Nebler, Bangalore and Ms Manjushree K(Alumnus 2017-20), TCS, Kochi, were invited as resource persons.
- As part of the industry connect program on career guidance the department conducted a career-oriented session via online mode on Industry Expectations & Digital Technologies for all the 1st and 2nd year BCA and BSc students on 10/06/2021. Mr Sreenivasa R K, Academic Interface Manager, Karnataka Head, TCS was invited as resource person.
- Claret Center for Skills Development and Department of Computer Science in association with ICT Academy organized capacity building and skill enhancement programme on ‘Essential Interview Skills’, in virtual mode, for the students of 2nd year BCA and BSc on 7/08/2021. Ms A Julie Krubhavathi, Senior HR Manager-EC group Datasoft Private Limited, Chennai was the resource person.

Skill Development Workshops Conducted

- In association with CyberPsySkill Development Workshop on ‘Cyber Security-Demand for Opportunities’ for the students of II BCA from 24/10/2020 to 25/10/2020. Ms. HimaBinduVejella, Co-founder CyberPsy, Mr Lokesh Singh, Sr. Cyber Security Analyst, Mentor, CyberPsy were the resource persons.
- Student Enrichment Workshop on ‘Cyber Safety and Security Awareness, for all the students of BCA on 06/11/ 2020. Ms Nirmala L, Project officer ISEA, Centre for Development of Advanced Computing (C-DAC), Govt. of India, Hyderabad was the resource person.
- Workshop on ‘Design Thinking, IPR and Innovation’ for advanced learners students of BCA and BSc on 28/06/2021. Mr Chinmaya Dash, Dr Safeer Pasha, Dr Rashmi B H, Assistant Professor(s), St.Claret College were the resource persons.

Exceptional Days’ Celebrations

- The department celebrated various exceptional days during the academic year 2020-2021. ‘World Mental Health Day’, on 10/10/2020. Rev. Fr Emmanuel PJ, Director of Kristu Jayanthi college of Law and Mr VignanthBapu, Asst. Prof. and co-ordinator, Kristu Jayanthi college, Bangalore delivered a virtual expert talk on Moving Towards Happiness and Wellness.
- To commemorate the technological advancements in various fields of science and technology the department celebrated National Science Day on 25/02/2021, National Technology Day on 11/05/2021. National Statistics Day was celebrated on 29/06/2021.
- The department in collaboration with Science Club celebrated ‘National Science Day’ on 25th February 2020 which included 73 participants. Science quiz and Paper Presentation were the events conducted on this day. The students had a platform to showcase their creative ideas and enhance their knowledge of science.

Extension Activities

- Department of Sciences and NCC jointly conducted an extension activity at NAMS SnehaSadan, M S Palya, Bangalore on 19/11/ 2020.
- Department of Computer Science conducted an extension programme in association with NCC for the workers of BBMP Help Centre at Jalahalli Village on 11/12/2020.

- Department of computer science and NSS organised “Digital Literacy Week”-an online extension program on computer literacy drive for the local community and the parents of second-year BCA from 24/05/2021 to 31/05/2021.
- As part of the extension programme, the Department of Sciences conducted an Awareness program on wellness and health for the parents of first-year BCA and BSc students via online mode. The resource person for the day was Dr Kundum Ramiah Prasad, MD, DNB, FRCR(UK)FRANZR, Specialist Radiologist, Quantum Radiology, Medical imaging, Mount Druitt.NSW. Dr. Shweta Unni Nilanjan, Ayurvedic Nadi Doctor, Sri Sri College of Ayurvedic Science and Research Hospital, Bangalore from 26/6/2021 to 27/6/2021.

PRAJNAN 2020

In association with ICT Academy the 7 Days National Virtual Faculty Development Programme on ‘Preparing Tomorrow's Workforce for the Fourth Industrial Revolution’ from December 15-21, 2020 is organized by the Department of Computer Science. Mr Balaji Kothandan, Vice President, Powerol Energy Systems, Chennai, Mr Sanjeevi Raj, Vice President & HR and Administration, Servall Engineering Works (P) Ltd., Coimbatore, Ms Divya Anand, Founder & Director, Dlogix Consulting (OPC) (P) Ltd., Bangalore, Ms Sindhu Kalyanasundaram, Organizational Development and Leadership Coach, Coimbatore, Ms Tulanahina Maity Pandey, CVP & Head HR – Bancassurance, Max Life Insurance, Gurugram, Mr D Vishnu Prasad, State Head Karnataka, ICT Academy, Bangalore, Ms Harini Sreenivasan, Partner, Semcostyle Institute India, Mumbai were the resource persons of the program.

INTERNATIONAL FDP

In association with Cypher Analytics 7 days Virtual International FDP on ‘Data analysis using R’, is organized by the Department of Sciences from 07/12/2020 to 12/12/2020. Mr Praveen Kumar, Senior Data Scientist was invited as the resource person.

INFINIX 2020

Department of Sciences organized INFINIX 2020 an inter-collegiate Fest for PUC students on 18/12/2020. Fr. Abraham P J, Vice Principal, St. Claret College inaugurated the program and addressed the gathering. The fest comprises of many events such as quiz, pick and speak, photography etc.

PANEL DISCUSSION

To create an awareness about entrepreneurial development the department conducted a panel discussion on ‘The Importance of Innovation in Entrepreneurship’, for 1st & 2nd Year BSc and BCA

students on 12/02/2021. Mr. Sidhant Dugar, COO, Designer Export, Dr Vivek Mendonsa, Mentor, SP Jain Institute of Management, Ms Harshala Chavan, Founder, Merrative, Community, Ms Kaveri Tikmani, Founder, Write Side up Solutions Mr. Rahul Jain, Partner, Swastik Food were the resource persons.

PROFESSIONAL DEVELOPMENT PROGRAMME

For upskilling the knowledge of the staff members of St. claret college, the department conducted, via online mode a Professional Development Programme on ‘Office 365’, from 27/5/2021 to 29/5/2021. Mr Manjunath, Centre Head, Mark Education Academy was invited as the resource person

LAKSHYA 2021

To inculcate research aptitude among young minds and nurture their innovative thinking the department conducted Intra Collegiate Paper Presentation Competition LAKSHYA for all the students of BSc and BCA on 3/7/2021. Rev Fr Abraham P J, Vice Principal, St. Claret College inaugurated the program. Mr Simon Sebastian, Ms Shabnam F. Mr Gourab H S and Mr Xavier Prathap W were the alumni resource persons invited as judges during the competition.

SAMVIT 2021

To provide a platform to discuss and exchange ideas and to know about the recent emerging trends in science and technology the department organized two-day Virtual International Conference SAMVIT 2021 in association with ICT Academy on the theme “Emerging Trends in Science and Technology” was organized between 05/08/2021-06/08/2021. Dr. Luís Miguel Cardoso, Professor, Higher School of Education and Social Sciences of the Polytechnic Institute of Portalegre, Portugal was the chief guest of the inaugural programme. The technical talk was delivered by Mr Tandava Krishna Popuri Director, Firmware Group DELL EMC India. The various technical sessions were chaired by Dr M.S Josephine, Professor, Department of Computer Applications, Dr M G R University, Tamilnadu. Mr Mahesh Narayan, Senior Manager, Advanced Analytics & Artificial Intelligence Professional, Accenture. Dr A. B Rajendra, Professor and Head, Department of Information Science and Engineering, Vidyavardhaka College of Engineering, Karnataka and Dr M Athiya Kumaraguru, Assistant Professor, SreeAbhirami Arts and Science College for Women, Tamilnadu.

FAREWELL FELICIA 2021

The department conducted farewell Felicia on 15/09/2021 for the outgoing batch of 2018-2021. The programme contained lots of fun games and cultural activities. The outgoing students were felicitated by the students of 1st and 2nd year batches.

Workshops/FDPs/Conferences/Meets/Summits/Orientation Programmes/ Launches/ Symposiums/Training Programmes/Courses/Skill Development Programmes/Quizzes Attended by the Faculty

Ms Jayalakshmi R, HoD	<ul style="list-style-type: none">• Participated in International Webinar on 'Emerging Industrial Trends in Computing Technology' organised by St. Anne's Degree College for Women, Bangalore on 24-11-2021.• Participated in three Week national level Faculty Development Program organised by Saint Francis De Sales College, Nagpur on 01-12-2020.• Participated in institutional level FDP on Basics of Research Methodology organised by Research Promotion Cell, St. Claret College from 02-12-2020 to 05-12-2020.• Participated in a workshop on Writing Funded Projects organised by RPC in association with IQAC on 23-01-2021.• Department of Computer Sciences completed an 8-week course on Consumer Behaviour from NPTEL conducted by the Indian Institute of Technology Kharagpur from January to March 2021.
Mr Chinmaya Dash, Assistant Professor	<ul style="list-style-type: none">• Attended a one-week AICTE Sponsored Short Term Training Programme on Harmony in the Workplace: Effective Interpersonal & Communication Skills conducted by Department of Science & Humanities, Sri Venkateshwara Engineering College, Tirupati from 26-10-2020 to 31-10-2020.• Attended a one-day National Webinar on UGC's Career Advancement Scheme for Faculty Conducted by Academic Research Committee, Mahatma Gandhi Vidyamandir's Arts, Science and Commerce College, Harsul, Nashik on 27-10-2020.• Participated in a two-day international level seminar on Industry 4.0-The Digital Convergence organised by Department of

	<p>Computer Science, Kangu College from 06-11-2020 to 07-11-2020.</p> <ul style="list-style-type: none">• Participated in institutional level FDP on Basics of Research Methodology Organised by Research Promotion Cell, St.Claret College from 02-12-2020 to 05-12-2020.• Participated in a five-day national level FDP on Natural Language Processing sponsored by TEQIP-III organised by Compucom Institute of Technology and Management from 07-12-2020 to 11-12-2020.• Participated in two days International Conference on Soft Computing and its Engineering Applications organised by SCM Patel Institute of Computer Application from 11-12-2020 to 12-12-2020.• Participated in one day national level seminar on Understanding National Education Policy-2020 sponsored by RUSA organised by Vivekanad College, Kolhapur on 26-12-2020.• Participated in international level UGC-CPE Sponsored Workshop on E-Waste: Awareness and its management organised by Science College, Nanded on 09-01-2021.• Participated in national level NAAC Sponsored Conference on Revised Assessment and Accreditation Framework of NAAC: An approach organised by Smt. Sushiladevi Deshmukh Senior College, Latur on 16-01-2021.• Participated in a workshop on Writing Funded Projects organised by RPC in association with IQAC on 23-01-2021.• Participated in national level seminar on National IP Literacy Week organised by Ministry of Education’s Innovation Cell, in association with AICTE from 27-01-2021 to 03-01-2021.• Participated in one-week national level short term Training program on Recent Trends in Research Methodology organised St. Claret College in Collaboration with RSRI from 22-02-2021 to 27-02-2021.
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	<ul style="list-style-type: none"> • Attended an online training for a month organised by MoE's Innovation Cell & AICTE from 30-06-2021 to 30-07-2021. • Attended a National level 16 weeks ARPIT refresher course on 'Teacher and Teaching in Higher Education' organised by SWAYAM-AICTE from 01-12-2021 to 21-08-2021.
<p>Ms Somanjoli Mohapatra, Assistant Professor</p>	<ul style="list-style-type: none"> • Attended a National level Virtual Session-Meeting on e-Manna Learning in association with ALL INDIA ASSOCIATION FOR CHRISTIAN HIGHER EDUCATION (AIACHE) organized by e- Manna Media Hub on 14-10-2020. • Attended a National level 15 Days online certificate course of professional documents with MS-Word Organized by Department of Computer Science and Applications, Sanatan Dharma College, Ambala Cantt from 14-10-2020 to 28-10-2020. • Attended an International Webinar on 'Artificial Intelligence and its Applications', organized by International research and Collaboration Cell (IRCC) of Shri Venkateshwara Group of Institutions, Gajraula on 16-10-2020. • Attended a National Virtual Industrial Training Program on 'Full Stack Development' organized by Sree Narayana Guru College, Department of Computer Science in collaboration with Innovaskill Technologies, Bangalore on 17-10-2020. • Attended One day online workshop on 'creation of educational videos with video editor' organized by Tumkur University Teachers Educators Association, Tumkur University on 18-10-2020. • Attended a National Webinar on Under the Aegis of UGC Paramarsh Scheme on Revised Accreditation of Framework of NAAC Quality Enhancement, Practices in Higher Education Organized by S.S Jain Subodh PG Autonomous College, Jaipur, Rajasthan on 21-10-2020. • Attended a one-week AICTE Sponsored Short Term Training Programme on Harmony in the Workplace: Effective Interpersonal & Communication Skills conducted by Department

	<p>of Science & Humanities, Sri Venkateshwara Engineering College, Tirupati from 26-10-2020 to 31-10-2020.</p> <ul style="list-style-type: none"> • Attended a National Online workshop on ICT Tools for teaching and learning Organized by Department of Commerce and Management Studies, Christ College (Autonomous), Irinjalkuda, Thrissur on 28-10-2020. • Participated in national level webinar on Project proposal and project funding organised by Department of Computer Science St. Thomas College, Kozhencherry in association with KSHEC on 05-11-2020.
<p>Lt Prakash Chandra Behera, Assistant Professor</p>	<ul style="list-style-type: none"> • Attended a one-day National Webinar on UGC's Career Advancement Scheme for Faculty Conducted by Academic Research Committee, Mahatma Gandhi Vidyamandir's Arts, Science and Commerce College, Harsul, Nashik on 27-10-2020. • Participated in a six-day national level webinar on Linear Transformation and Metric Space organised by Department of Sciences SVU College, Tirupati from 02-11-2020 to 07-11-2020. • Participated in a two-day international level seminar on Industry 4.0-The Digital Convergence organised by Department of Computer Science, Kangu College from 06-11-2020 to 07-11-2020. • Participated in institutional level FDP on Basics of Research Methodology Organised by Research Promotion Cell, St.Claret College from 02-12-2020 to 05-12-2020. • Participated in a five-day national level FDP on Natural Language Processing sponsored by TEQIP-III organised by Compucom Institute of Technology and Management from 07-12-2020 to 11-12-2020. • Participated in a workshop on Writing Funded Projects organised by RPC in association with IQAC on 23-01-2021. • Participated in a one-day national level webinar on Precious Plastic organised by Advance Mechanical Services Pvt. Ltd. (AMS-India) in association with Suprajiv on 30-05-2021.

	<ul style="list-style-type: none"> • Participated in one day National Conference on Developing Green and Value Based Business ecosystem organised by Vikrant Institute of Technology and Management on 30-05-2021. • Attended an International FDP on Advanced teaching and Research conducted by Amity University from 01-06-2021 to 05-06-2021. • Attended a 6-day FDP on NEP organised by St. Francis College from 12-07-2021 to 17-07-2021. • Attended a National Level IIC on ‘Innovation Ambassador training’ organised by IIC from 30-06-2021 to 30-07-2021. • Attended an online training for a month organised by MoE's Innovation Cell & AICTE from 30-06-2021 to 30-07-2021. • Attended a one-day international webinar organised by Limcon University on ‘Introduction to AL" on 14-08-2021.
<p>Ms Divya V R, Assistant Professor</p>	<ul style="list-style-type: none"> • Attended one-day Faculty Development Programme on Effective Online Education “Tackling Online Classes” organized by the Department of Economics, M.E.S Kalladi College, Mannarkkad in collaboration with CISCO Senses on 08-09-2020. • Attended Five days international e-Seminar on Recent Research in Mathematics (ISRRM - 2020) organized by the Department of Mathematics, School of Science, GITAM, Bengaluru from 11-09-2020 to 15-09-2020. • Attended an International Webinar on "Impact of Covid 19 On Elderly: A Case Study Based on Australia" organized by MES Kalladi College, Mannarkkad, Kerala on 08-10-2020. • One day National level Webinar on Working with IoT Devices organized by Department of Computer Science, MES Kalladi College, Mannarkkad, Palakkad, Kerala on 09-10-2020. • Attended a two-day National Webinar on Introduction to LATEX conducted by MES Kalladi College, Mannarkkad, Palakkad, Kerala from 16-10-2020 to 17-10-2020.

	<ul style="list-style-type: none"> • Attended a National Webinar on ‘Connecting the World with the Data We Can Trust’ organized by AnjumanArts, Science, Commerce College and PG Studies, Dharwad on 20-10-2020. • Attended a one-day International Webinar on Select Data Science wisely-3 mistakes to Refrain from conducted by Mar Athanasius College,Kothamangalam, Kerala on 20-10-2020. • Attended a one-day International Webinar on Journey towards the World of ISS organized by Mar Athanasius College, Kothamangalam, Kerala on 21-10-2020. • Presented paper on ‘A zero-inflated Poisson model for estimation of the proportion of Sterile Women’ in the International Virtual Conference on Prof. C R Rao’s School of thought on Statistical Sciences. (ICON - CRRAO – ST OSS - 2020) organised by the Department of Statistics, Ramanujan School of Mathematical Pondicherry University and Department of Mathematics and Statistics, Mrs. A V N College, Visakhapatnam on 28-11-2020. • Participated in institutional level FDP on Basics of Research Methodology Organised by Research Promotion Cell, St. Claret College from 02-12-2020 to 05-12-2020. • Participated in one day workshop on Research Methodology organised by PG and Research Department of Mathematics, Catholocate College, Pathanamthitta on 14-12-2020. • Participated in a national level seminar on National Education Policy- NEP 2020 organised by IQAC, St. Francis College in association with Disha Bharath on 07-01-2021. • Participated in a workshop on Writing Funded Projects organised by RPC in association with IQAC on 23-01-2021. • Participated in a one-day international webinar on Review on Union Budget 2k21 organised by KES’s IEMS B-School, Hubli and SIF Consultants Private Ltd, Hubli on 02-02-2021.
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	<ul style="list-style-type: none"> • Participated in a one-day international seminar on Deep Learning demystified: Achieving great outcomes with simple thinking organised by St. Claret Institute of Management on 10-02-2021. • Completed four-month online course on Covid 19 conducted by Coursera on 18-01-2021. • Participated in one-week national level short term Training program on Recent Trends in Research Methodology organised St. Claret College in Collaboration with RSRI from 22-02-2021 to 27-02-2021. • Participated in a one-day national level webinar on NEP – 2020 organised by Kaizen Eduplus society’s IEMS B-School, Hubli on 28-04-2021. • Participated in one-week international level workshop on Research Paradigms organised by R & D Cell, St. Francis College, Koramangala, Bangalore from 03-05-2021 to 08-05-2021. • Participated in 5 days national level webinar on Digital Congruence in Electronics and Communication organised by Department of ECE, DR.N.G.P Institute of Technology- Coimbatore from 17-05-2021 to 21-05-2021. • Participated in one-week national level AICTE-ISTE funded Induction / Refresher program (3rd - Phase) organised by Department of Electronics & Communication Engineering, K.S.Institute of Technology from 24-05-2021 to 29-05-2021. • Participated in a one-day national level webinar on Precious Plastic organised by Advance Mechanical Services Pvt. Ltd. (AMS-India) in association with Suprajiv on 30-05-2021. • Attended a 6-day National level FDP on Multi-technology organised by CSE, RYMEC in collaboration with Brainovision Solutions and National Youth Council of India from 28-07-2021 to 03-08-2021.
Ms Sherin Jibu, Assistant Professor	<ul style="list-style-type: none"> • Attended one-day Faculty Development Programme on Effective Online Education “Tackling Online Classes” organized by the

	<p>Department of Economics, M.E.S Kalladi College, Mannarkkad in collaboration with CISCO Senses on 08-09-2020.</p> <ul style="list-style-type: none"> • Attended Five days international e-Seminar on Recent Research in Mathematics (ISRRM - 2020) organized by the Department of Mathematics, School of Science, GITAM, Bengaluru from 11-09-2020 to 15-09-2020. • Attended an International Webinar on "Impact of Covid 19 On Elderly: A Case Study Based on Australia" organized by MES Kalladi College, Mannarkkad, Kerala on 08-10-2020. • One day National level Webinar on Working with IoT Devices organized by Department of Computer Science, MES Kalladi College, Mannarkkad, Palakkad, Kerala on 09-10-2020. • Attended a two-day National Webinar on Introduction to LATEX conducted by MES Kalladi College, Mannarkkad, Palakkad, Kerala from 16-10-2020 to 17-10-2020. • Attended a National Webinar on “CONNECTING THE WORLD WITH THE DATA WE CAN TRUST” organized by AnjumanArts, Science, Commerce College and PG Studies, Dharwad on 20-10-2020. • Attended a one-day International Webinar on Select Data Science wisely-3 mistakes to Refrain from conducted by Mar Athanasius College, Kothamangalam, Kerala on 20-10-2020. • Attended a one-day International Webinar on Journey towards the World of ISS organized by Mar Athanasius College, Kothamangalam, Kerala on 21-10-2020. • Presented paper on ‘A zero-inflated Poisson model for estimation of the proportion of Sterile Women’ in the International Virtual Conference on Prof. C R Rao’s School of thought on Statistical Sciences. (ICON - CRRAO – ST OSS - 2020) organised by the Department of Statistics, Ramanujan School of Mathematical Pondicherry University and Department of Mathematics and Statistics, Mrs A V N College, Visakhapatnam on 28-11-2020.
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	<p>Department of ECE, DR.N.G.P Institute of Technology- Coimbatore from 17-05-2021 to 21-05-2021.</p> <ul style="list-style-type: none"> • Participated in one-week national level AICTE-ISTE funded Induction / Refresher program (3rd - Phase) organised by Department of Electronics & Communication Engineering, K.S.Institute of Technology from 24-05-2021 to 29-05-2021. • Participated in a one-day national level webinar on Precious Plastic organised by Advance Mechanical Services Pvt. Ltd. (AMS-India) in association with Suprajiv on 30-05-2021. • Attended a 6-day National level FDP on Multi technology organised by AVIT Collaboration with Brain O Vision from 28-07-2021 to 03-07-2021. • Attended a 6-day National level FDP on Multi technology organised by Ananthalakshmi Institute of Engineering and Sciences from 28-07-2021 to 03-07-2021. • Attended a 6-day National level FDP on Multi technology organised by CSE, RYMEC in collaboration with Brainovision Solutions and National Youth Council of India from 28-07-2021 to 03-07-2021.
Dr Jyothi Prasad, Assistant Professor	<ul style="list-style-type: none"> • Attended Five days international e-Seminar on Recent Research in Mathematics (ISRRM - 2020) organized by Department of Mathematics, School of Science, GITAM, Bengaluru from 11-09-2020 to 15-09-2020. • Participated in institutional level FDP on Basics of Research Methodology Organised by Research Promotion Cell, St.Claret College from 02-12-2020 to 05-12-2020. • Presented a paper on “Numerical and Asymptotic solutions of two- dimensional Boundary layer flow along with heat transfer over a constant wedge” in an Online International Conference on “History and Development of Mathematics” organised by Maharshi Dayanand University Rohtak on 22-12-2020.

	<ul style="list-style-type: none"> • Participated in a national level one week FDP on Research and current trends in Mathematics organised by Pillai College of Engineering from 26-12-2020 to 31-12-2020. • Participated in a National level Mathematics Quiz organised by Surana College Bangalore on 30-12-2020. • Participated in the one-week international workshop on Analysis of data in Matlab Software organised by Rest Society for Research International from 04-01-2021 to 02-01-2021. • Participated in the two-day international webinar on Computational Mathematics organised by Government first grade college, Vijaynagar, Bangalore from 10-02-2021 to 11-02-2021. • Participated in a one-day webinar on Ona Adaptive Finite Element Discretization of Darcy- Brinkman-Forchheimer Model conducted by Reva University on 20-03-2021. • Participated in one-week international level workshop on Research Paradigms organised by R & D Cell, St. Francis College, Koramangala, Bangalore from 03-05-2021 to 08-05-2021.
Dr Rajkumar N	<ul style="list-style-type: none"> • Participated in a 30-Day webinar on 'Matlab Master Class 2020', organized by IETE Mumbai and Pantech Prolabs India Pvt Ltd on 01-09-2020. • Participated in a national level workshop on Online Teaching Tools & Resources organised by Super Teacher Edu-reforms on 15-11-2020. • Participated in a national level webinar on Current Trends in IT Industry organised by LMIMS Partnered with XIME on 16-11-2020. • Participated in an international level webinar on Accelerating AI Adoption with Machine Learning organised by Netcom Learning on 19-11-2020. • Participated in five-day international workshop on AI & its applications organised by CIET from 23-11-2020 to 27-11-2020.

	<ul style="list-style-type: none"> • Participated in an international level webinar on Intellectual Property Rights (IPR) & Patent Process organised by Hindusthan College of Engineering and Technology on 24-10-2020. • Participated in national Webinar on Essentials of Research Writing & Using Mendeley Reference Manager organised by University of Mysore on 27-11-2020. • Participated in a national level webinar on Digital Twin: Technology for post COVID-19 organised by BVICAM on 28-11-2020. • Participated in three Week national level Faculty Development Program organised by Saint Francis De Sales College, Nagpur on 01-12-2020. • Participated in institutional level FDP on Basics of Research Methodology Organised by Research Promotion Cell, St.Claret College from 02-12-2020 to 05-12-2020. • Participated in one day International Webinar on AI in Everyday Life – Threat or Opportunity organised by BVICAM, New Delhi on 04-12-2020. • Participated in two-day national level FDP on MACHINE LEARNING TECHNIQUES organised by Vel Tech Multi Tech Dr. Rangarajan Dr. Sakunthala Engineering College from 11-12-2020 to 12-12-2020. • Participated in one day International Webinar on Digital Inclusion of Underserved Communities organised by BVICAM on 18-12-2020. • Participated in one day International Webinar on 5G Network and its Real Time Applications organised by MITS on 19-12-2020 • Participated in 7 days national level FDP on Application of Tools & Techniques In Research Methodology & Accelerate to Publish Article in Scopus and Web Of Science organized by Hindustan College of Arts and Science from 19-12-2020 to 24-12-2020.
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	<ul style="list-style-type: none"> • Participated in an International level workshop on IoT with Cooja Simulator organized by Madanapalle Institute of Science and Technology on 01-01-2021. • Attended an international webinar on #digital minds@21 conducted by Dr. Panjanrao Deshmukh Institute of management and technology, Nagpur on 05-03-2021.
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Papers Published/Patents by the Faculty

Sl. No.	Name of the Faculty	Title of the Paper	Name of the Journal	URL/ISSN No	Month and Year
1	Mr Chinmaya Dash	A novel approach for improving security in Software development in small software firm	Emerging Technology in Data Mining and Information Security	https://link.springer.com/chapter/10.1007/978-981-15-9774-9_64 N: 2367-3370	May,2021
		Exploratory Analysis for Waste in IT industries during project development using Agile-Lean practices	Emerging Technology in Data Mining and Information Security	https://link.springer.com/chapter/10.1007/978-981-15-9774-9_65	May,2021

		Lean Six Sigma in IT SME's for Software Process Optimization and Minimization of Wastes	Indian Journal of Natural Sciences	0976 – 0997	Jun-21
		An Approach for Secure Software Development Life Cycle in Small Software Firms	Indian Journal of Natural Sciences	0976 – 0997	Jun-21
		IAIP - Interactive Business Data: Interactive Intelligent Bussiness Data Visualization Using AI-Based Programming	Indian Patent(publishe d)		Jul-05
		Emotional health monitoring system for students	Indian Patent(publishe d)		Jul-05
		An artificial intelligence based real time drowsiness detection system	Australian Grant Innovation patent		Jul-05
		System for monitoring and controlling internet of things(IOT) Boiler	Australian Grant Innovation patent		Jul-05
2	Mr Prakash Chandra Behera	A novel approach for improving security in Software development in small software firm	Emerging Technology in Data Mining and Information Security	978-981-15-9773-2	May, 2021

	Exploratory Analysis for Waste in IT industries during project development using Agile-Lean practices	Emerging Technology in Data Mining and Information Security	978-981-15-9773-2	May,2021
	Lean Six Sigma in IT SME's for Software Process Optimization and Minimization of Wastes	Indian Journal of Natural Sciences	0976 – 0997	Jun-21
	An Approach for Secure Software Development Life Cycle in Small Software Firms	Indian Journal of Natural Sciences	0976 – 0997	Jun-21
	IAIP - Interactive Business Data: Interactive Intelligent Business Data Visualization Using AI-Based Programming	Indian Patent(publishe d)		Jul-05
	Emotional health monitoring system for students	Indian Patent(publishe d)		Jul-05
	An artificial intelligence based real time drowsiness detection system	Australian Grant Innovation patent		Jul-05
	System for monitoring and controlling internet of things(IOT) Boiler	Australian Grant Innovation patent		Jul-05

3	Ms. Somanjoli Mohapatra	An IoT and fog computing enabled intelligent healthcare monitoring system to optimize the cloud storage	Turkish Journal of Computer and Mathematics Education	1309-4653	May-21
		A Survey on Threats and Corrective Measure on IoT Security	Turkish Online Journal of Qualitative Inquiry		Jun-21
4	Dr. Rajkumar N	Secure Data Sharing In Agriculture Using Blockchain Technology	Turkish Journal of Computer and Mathematics Education	1925-1933	May-21
		System and Design of Sensor Based Electronic Ventilator for COVID-19 Patients,	Web of Science	20214102229	Jun-21
		Automatic Attribute Differentiator and Controller for IOT Applications	Australian Grant Innovation patent		Jul-05

Book(s)/Chapter(s) Published by the Faculty

Sl. No.	Name of the Faculty	Title of the Book/chapters published	Name of the publisher	ISBN /ISSN No	Year
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1	Ms. Somanjoli Mohapatra	A handbook on Industry 4.0 Exploring New Horizons and Challenges for New Normal Post COVID-19	Taurean Publications, New Delhi	978-93-5407- 414-1	2020
2	Mr Prakash Chandra Behera	Business Mathematics and Logical Reasoning	Vision Book House	978-93-90436- 56-9	2020
3	Mr Chinmaya Dash	Information Technology for Business	Himalaya Publication House	978-93-5433- 604-1	2020

IT Club

The club promotes and facilitates the effective integration of technology into the basic mission of the college through planning and coordinating various competitions and activities. To keep pace with the rapid changes in the Information Technology sector, IT club plays an important role. The IT club regularly conducts various activities and competitions and encourages the students to partake in inter/intra collegiate events. During the academic year 2020 – 21, the office bearers of IT club were Ms Geethanjali Gof III BCA – President, Mr Leonard Alphonso II BCA – Vice President and Ms Somanjoli Mohapatra– Faculty Coordinator.

SUBHARAMBH 2020

The IT club offered an online platform with an array of events exclusively for the I year BCA and BSc students. The students actively participated in various events like reasoning tests, online quiz contests, and an innovative video-making competition called KNOW ME. The participants received an e-certificate of participation and winners were awarded the e- certificate of achievement.

INSPIRE 2021 (INTRA COLLEGIATE INFORMATION SCIENCE FEST)

The Department of Sciences organized its 4th edition of an intra-collegiate IT fest 'INSPIRE' 2021 for the I and II years BCA and BSc students on January 8, 2021. The various events of INSPIRE 2021 were IT manager, coding and debugging, IT quiz, gaming, English, math event, photography and video editing. All the events were conducted in online mode. The winners received the certificate of appreciation.

SESSION ON MANUSCRIPT DRAFTING

The IT club conducted a session on 'How to write a paper on 5/12/2020. Mr Jerin John, Alumnus 2013-16 guided the students about how to write a paper and introduced them to the IEEE format to be followed for paper publication. He also mentioned plagiarism and various tools related to it.

SESSION ON STRESS MANAGEMENT

The department of computer science, IT club conducted a virtual interactive session on "Stress Management- Hello Happy, Goodbye Stress" on 18/05/2021. Ms Smitha Srikanth, L&D Consultant and Head of Training, Fluency Learning, Bangalore was invited as a resource person for the session. This session aimed at providing information on how to handle stress in different situations of life. This session is not only organised to build self-confidence among students but also intended to provide experiential knowledge about different life situations.

HANDS-ON SESSION ON COMMUNICATION & PUBLISHING TOOLS

The department of computer science, IT club organized a hands-on session on "Communication & Publishing Tools" on 4/6/2021. Students from all the batches of BCA and BSc participated during the session. The IT club along with the student representatives conducted the session for the students of I year BSc and BCA. The session aimed at orienting students on google services especially on publishing & communication tools. Mr Manish M and Mr Leonard Alphonso, student representatives demonstrated various useful tools available under google publishing & communication tools.

SESSIONS ON RESEARCH ACTIVITIES

- To inculcate research activity among the students the department conducted this session. This session aims to ignite creative thoughts in young minds to initiate their innovative work towards research. The club in association with Research Promotion Cell(RPC) conducted a virtual session on "*Academic Writing- A Way Forward*" on 22/05/2021. Dr Rajkumar N, the

coordinator RPC, Asst. Prof., Dept. of Computer Science was the resource person during the session.

- To help the students in analytical thinking and accelerate their reasoning capability, the club in association with Research Promotion Cell(RPC) conducted a virtual orientation session on “*Research Tools*” on 01/06/2021. Dr Rajkumar N, the coordinator RPC, Asst. Prof., Dept. of Computer Science was the resource person.

OTHER ACTIVITIES AND ACHIEVEMENTS

- The IT Club coordinated National Technology Day via online mode on 11/05/2021. On account of this day, the club made a video on the theme - Science & Technology for a sustainable future, and also invited creative works like articles and posters during this day.
- Mr Aryan Rai V, student of 1st year BCA won 1st place in the event THINK PANNU MAPPI(ARTICLE REVIEW), a National Level IT Fest LOGIN 2K21 organized by Christ College, Department of Computer Science from 30/06/2021- 1/07/2021.
- Ms Jyothis Joy, student of 2nd year BCA secured Runners place in Scholar’s Tale at National Level Technical Fest NUTPAM’20 organized by Sai Ram Institute of Technology, Chennai on 29/10/2020.
- Ms Jyothis Joy, student of 2nd year BCA has been awarded third place in the ‘Translathon’ - The Science Business Idea contest conducted as part of NATIONAL SCIENCE DAY, organized by the Deanery of Sciences, KristuJayanti College (Autonomous), Bengaluru in association with Karnataka State Council for Science and Technology on 27/02/ 2021.

Science Club

Science Club was launched in 2019 to enrich students in the world of sciences. The club mainly focuses on subjects such as Mathematics, Statistics, Economics and Computer Science. Science club aims to promote the significance of Science by supporting learners’ enthusiasm and challenging their creativity. The office-bearers of Science Club for the academic year 2020 – 21 were Ms Litty Adens of III BSc – President, Mr Rajeev R of II BSc – Vice President and Ms Divya V R – Faculty Coordinator.

MAGNIX

The Science Club by the Department of Sciences conducted an IntraCollegiate fest “MAGNIX 2020” from 14th to 20th Nov 2020. There were 32 participants from various departments. The

participants were asked to prepare a PowerPoint presentation on the topic “A Comparative Study on the Increase in Gamers and Youtubers during lockdown”. The winners of MAGNIX were given opportunities to represent the college at several intercollegiate fests.

Ben Venuto Amigos

The Science club conducted ‘Ben Venuto Amigos’ an intra online competition from December 14 – 17, 2020 which is an Icebreaking session conducted for the 1st year students. It is a platform given to the freshers to showcase their talents and to bring a bond among the juniors and seniors.

QUEEN’S GAMBIT

The Science Club from the Department of Sciences conducted a gaming event "QUEEN’S GAMBIT" on 30th April 2021. The event had 40 participants from both BCA and B.Sc. The winners were awarded certificates. This virtual chess competition helped the students to apply their decision-making skills, analyzing skills and competitive approach.

CAREER COUNSELLING SESSION

The Science Club from the Department of Sciences conducted a Career Counselling session on ‘An Introduction to future Scope and Careers in Statistics’ on 5th June 2021, to all the students of B.Sc. and final year BA. The Speaker was Mr Sandeepa M S, Sr.Data Scientist at Mindtree.

BON VOYAGE 2021

The Science Club from the Department of Sciences organized ‘Bon Voyage’ to the 1st graduates of BSc on the 16th of September 2021. The event was well organized with various activities including pick and speak, dance, and singing performances. The graduates were felicitated with gifts and certificates.

Ms Jayalakshmi R.

Head of the Department