3.2 Innovation Ecosystem

The Institution has to create an ecosystem for innovation including an incubation centre and other initiatives for the creation and transfer of knowledge. The institution shall conduct workshops/seminars on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices. Awards for innovation won by institution/teachers/research scholars/students, start-ups incubated on-campus are explicitly commended.

RESPONSE 247

3.2.2.1 **Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years.**

2022-23	2021-22	2020-21	2019-20	2018-19
90	59	68	30	15

File Description	Link to the document
Details of workshops/seminars/conference in AY 2022-23	**View document**
Details of workshops/seminars/conference in AY 2021-22	**View document**
Details of workshops/seminars/conference in AY 2020-21	**View document**
Details of workshops/seminars/conference in AY 2019-20	**View document**
Details of workshops/seminars/conference in AY 2018-19	**View document**

Criterion 3

3.2 Innovation Ecosystem

3.2.2 Number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

Workshop details

Year	Name of the workshop	Number of Participants	Date From – To
2019 - 2020	Quiz day	70	01/10/2019
	KSEB power Quiz	90	03/10/2019
	Expert talk on recent trends in civil engineering	150	21/10/2019
	Design project exhibition	100	14/11/2019
	Future fit :towards a new philosophy of construction	78	15/11/2019
	Programming in C	24	16/12/2019-20/12/2019
	Fundamentals of Computers and Networking .	52	06/01/2020-09/01/2020
	Know Your Branch, Be a Step Ahead One day workshop for first year students.	12	09/01/2020-10/01 2020
	Electrical Auto CAD.	15	13/02/2020
	Revit software training .	64	13/02/2020-14/02/2020
	Fundamentals of structural analysis.	80	20/02/2020
	Science day celebration.	100	28/02/2020
	Web App Development and Hosting using Bootstrap.	92	21/05/20
	Spillways and energy dissipator.	50	23/05/2020
	Files in C Programming.	52	26/05/20
	Sludge treatment and disposal.	60	27/05/2020
	Leading and controlling.	60	27/05/2020
Year	Name of the workshop	Number of Participants	Date From – To
2020 - 2021	Formal Writing.	46	28/05/2020
	Structure in C++ .	50	29/05/2020
	PHP- Form Handling Techniques.	45	30/05/2020
	Building Scalable Cloud Architecture on AWS .	53	05/06/2020
	Digital System Design using FPGA.	92	11/07/2020
	Industrial Revolution 4.0: Emerging Trends in Information Technology.	102	13/07/2020-17/07/2020
	workshop on IoT Product development.	71	20/07/2020-24/07/2020

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3.2 Innovation Ecosystem

Year	Name of the workshop	Number of Participants	Date From – To
	Recent Trends and Research Directions in Electrical Engineering.	132	21/07/2020-23/07/2020
	E Learning on LED bulb manufacturing.	15	27/07/2020
	The New Normal Post Covid Opportunities in Electronic Industry.	31	27/07/2020-31/07/2020
	Forensics in civil Engineering.	150	27/7/2020 - 03/08/2020
	Mathematics for Engineering research .	121	10/08/2020-14/08/2020
	World students' day celebration.	200	15/10/2020
	The art of publishing scientific research - A road map to success.	150	17/10/2020
	Python for microcontrollers.	44	31/10/2020-01/11/2020
	Power Quiz in association with KSEBL.	36	08/11/2020
	Workshop on scilab.	200	19/11/2020
	Science and Art of Planning and Designing the MEP System of building .	72	27/11/2020
Year	**Name of the workshop**	**Number of Participants**	**Date From – To**
2020 - 2021	Arduino workshop Batch II.	30	28/11/2020, 05/12/2020
	Demand Side Management & Energy Efficiency.	64	17/12/2020
	Mathematics quiz competition for engineering students.	33	22/12/2020
	Problem Solving and Ideation	80	10/02/2021
	Science Quiz Competition for Engineering Students	104	28/02/2021
	KTU Sponsored one week FDP on Mathematical Foundations for Machine Learning W	91	2/03/2021-26/03/2021
	Hands on training on Embedded C and Arduino	12	25/03/2021
	Online training on CAD, REVIT & PRIMEAVERA software for final year students by Habilete learning solutions	50	30/04/2021-30/05/2021
2021 - 2022	Online design competition- NAVARITIH' 21	130	06/06/2021
	REACT 21	15	10/06/2021-11/06/2021
	Recent Trends in Advanced Computing Technologies	100	10/06/2021 - 11/06/2021
	Sustainable Practices in Civil Engineering (SPICE'21)	59	10/07/2021-11/07/2021
	10 day online training on Ansys software for PG students by Habilete learning solutions	24	02/08/2021-18/08/2021

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3.2 Innovation Ecosystem

	Visit To Super Fab Lab at Kinfra Park, Kochi	31	12/08/2021
	World Organ Donation Day	100	13/08/2021
Year	**Name of the workshop**	**Number of Participants**	**Date From – To**
2021 - 2022	One Week Online Faculty Development Program On "Bio Fuels -Recent Trends and Future Prospects"	100	30/08/202- 03/09/2021
	Janani- Mother's Day Celebration	100	05/09/2021
	Engineers day Celebration , Talk on Engineers and Sustainable Development & Technical Quiz	150	15/09/2021
	3D printing	30	29-09-2021
	Building Information Modelling	150	10/10 /2021
	FDP on Machine Learning using Python	90	18/10/202- 22/10/2021
	REVIT ARCHITECTURE & 3DS MAX – An Introduction to Modelling softwares	60	25/11/202- 26/11/2021
	Step up to Python	35	01/12/2021- 10/12/2021
	Ideathon using Design Thinking,Product Development Pitching	60	06/12/2021- 07/12/2021
	IoT Product Development	45	10/12/2021- 11/12/2021
	National Online Quiz on "Biotechnology for a sustainable future" National Science Day Celebration	200	27/02/2022
	Inauguration of The Student's chapter of Indian Institute of Chemical Engineers- IIChE at Sree Buddha College of Engineering Pattoor	200	03/03/2022
Year	**Name of the workshop**	**Number of Participants**	**Date From – To**
2021 - 2022	Five Day Online Workshop on "Technological Interventions for the Sustainable Re-building of Kerala Post Flood"	58	08/03/2022- 12/03/2022
	workshop on C-Programmig	130	18/04/2022- 19/04/2022
	Know Your Branch, Be a Step Ahead One day workshop	34	20/04/2022- 21/04/2022
	Industrial Visit to Vizhinjam port	24	22-04-2022

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3.2 Innovation Ecosystem

Year	Name of the workshop	Number of Participants	Date From – To
	Inauguration of CASTELLOS activities, Unveiling of handwritten magazine, quiz,	150	26/04/2022
	Insight to LaTeX Software	18	27/04/2022
	Business Model Canvas & How to Design a Perfect Pitch Deck	70	28/04/2022
	Two day workshop on Implementation and Design of Solar Power Plant	27	09/05/2022-10/05/2022
	Workshop on Concrete Mix design	130	11/05/2022
	Writing & publishing a research article	130	19/05/2022
2022 - 2023	Workshop On REVIT & PRIMAVERA	120	04/07/2022-06/07/2022
	Orcad PSpice Designer Workshop	20	10/07/2022
	Orientation on GATE 2023	120	24/09/2022
	Workshop on FPGA	20	14/10/2022
	ASCE Inauguration	150	18/10/2022
	KSEB Power Quiz	40	20/10/2022
	Workshop on IoT using Arduino by Open Leaves	30	20/10/2022-21/10/2022
Year	**Name of the workshop**	**Number of Participants**	**Date From – To**
2022 - 2023	Blood Donation Camp	150	27/10/2022
	Online Quiz on Engineering and Technology	187	05/11/2022
	Workshop on "Problem Solving And Ideation"	100	17/11/2022
	E-Waste Management Awareness Campaign	100	18/11/2022
	Bioinformatics Tools and Softwares Workshop by IIT Kharagpur	100	21/11/2022-23/11/2022
	Logo Designing Competition For IC-SPET'23	150	23/11/2022
	Inauguration of CASTELLOS	150	30/11/2022
	Website and logo launch of IC – SPET'23	150	03/12/2022
	Workshop on 3D Printing -IEDC &IIC	50	19/12/2022
	Workshop on Abstract and Thesis Writing	20	02/03/2023
	Workshop on Intellectual Property Rights & IP Management for startup in association with IEDC and IIC	50	03/03/2023
	Industry familiarization -Eduriz	50	15/03/2023
	Workshop on plan your career	60	25/03/2023
	Awareness program regarding career opportunities in red hat technologies	100	27/03/2023
	Product Development And Prototyping	48	19/04/2023
	Make your own robot- IEDC	40	04/05/2023

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3.2 Innovation Ecosystem

Year	Name of the workshop	Number of Participants	Date From – To
	Environment Day celebrations & Water quality testing	20	04/05/2023
Year	**Name of the workshop**	**Number of Participants**	**Date From – To**
2023 - 2024	Environmental Day celebration, Technical Quiz, poster Design competition	150	05/06/2023
	AI club inauguration	200	03/08/2023
	Training program for specially abled children -	54	03/08/2023
	workshop on Futuristic of AI	150	03/08/2023
	Engineer's Day celebration- Best Civil Engineer's Contest	150	14/09/2023-21/09/2023
	Engineer's Day celebration inauguration	150	15/09/2023
	Workshop on Machine Learning	90	16/09/2023-17/09/2023
	Inauguration of Castellos Association for 2023-24	150	21/09/2023
	Workshop on Web Development application	72	26/09/2023
	Hands on Training onLED lamp making	70	30/09/2023
	Workshop on APP development with flutter	18	30/09/2023-19/10/2023
	Workshop on basics of java	135	03/10/2023-04/10/2023
	Two-day workshop on machine learning using python	58	10/10/2023-11/10/2023
	Two-day workshop on object-oriented concepts using java	56	12/10/2023 -13/10/2023
	Ideathon- idea competition (IIC&IEDC)	50	16/10/2023
	workshop on Machine Learning Using Python	120	27/10/2023-28/10/2023
	Two-day workshop on deep learning	60	30/10/2023-31/10/2023
	SINRO ROBOTICS-IIC&IEDC	48	22/11/2023
Year	**Name of the workshop**	**Number of Participants**	**Date From – To**
2023 - 2024	Workshop on Robotics	200	19/02/2024-21/02/2024
	Industrial academic conclave	250	25/03/2024

Conference details

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3.2 Innovation Ecosystem

Year	Name of the Conference	Number of Participants	Date From – To
2020 - 2021	National Conference on Recent Advances in Materials, Manufacturing and Thermal Sciences (RAMMTS-2020) C	100	18/06/2020
	National conference on biotechnology research-innovations & opportunities brio`20.	70	18/06/2020-19/06/2020
	Sustainable practices in civil engineering (spice 20)- national conference.	150	18/06/2020-19/06/2020
2021 - 2022	E – conference on Biotechnology Research Innovations and Opportunities (BRIO-2021)	100	10/06/2021-11/06/2021
	International Conference on "Impact of Data Science in Mechanical Engineering" (ICDSME 2021)	100	10/06/2021-11/06/2021
2022 - 2023	National Conference on Sustainable Practices in Civil Engineering	24	23/06/2022-24/06/2022
	National Conference REACT 2022	10	22/06/2022-23/06/2022
	National Conference on Recent Advances in Materials, Manufacturing and Thermal Sciences (RAMMTS-2022)	100	23/06/2022-24/06/2022
2023 - 2024	International Conference on Sustainable Practices in Engineering & Technology (IC-SPET'23)	150	14/06/2023-16/06/2023
	Conference recent threads in advancing computing	200	15-06-2023-16-06-2023
	International Conference on "Smart & Green Materials for Biotechnology, Biochemical Engineering and Mechanical Applications" (IC-SGMat 2023)	100	20-11-2023, 01-12-2023, & 02-12-2023

Seminars details

Year	Name of the Seminar	Number of Participants	Date From – To
.	Challenges in biopolymer production.	150	28/10/2019
	A seminar on electric vehicle - sustainable environment.	90	30/10/2019

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3.2 Innovation Ecosystem

2019 - 2020	IEEE Awareness Programme.	20	23/11/2019
	Job opportunities in Embedded Systems.	67	08/01/2020
	Webinar on Getting started with IoT Product Development.	47	06/05/2020
	Webinar on Energy Audit.	81	19/05/2020
	Downstream processing in biotechnology-finishing operations.	150	22/05/2020
	Design of Digital Counter.	23	29/05/2020
2020 - 2021	Bio-entrepreneurship- opportunities and challenges.	100	02/06/2020
	Travelling Salesman Problem-Branch & Bound Method.	56	04/06/2020
	Career prospects in biotechnology and biochemical engineering.	150	17/06/2020
	Recent Trends in Advanced Computing Technologies	38	18/06/2020-19/06/2020
	Webinar on Introduction to Design Thinking.	40	06/07/20
	Big Data Analysis for Auditing.	52	11/07/20
2020 - 2021	Webinar on "COVID-19,Business Impact and how to prepare for the challenge.	50	17/07/2020

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3.2 Innovation Ecosystem

	Name	Number	Date
	Opportunities in civil engineering.	150	22/07/2020
	Digital Image Analysis using Deep Neural Network.	110	26/07/2020
	Opportunities after B.Tech.	105	01/08/2020
	Essentials of Cyber Security in Digital Era.	45	10/08/2020
	Cyber Attacks for Gaining an Initial Foothold.	60	22/08/2020
	Online program on "professional ethics" .	150	12/09/2020
	Cyber Security and the Career Paths.	104	26/09/2020
	Types of evaporators and theory.	150	06/10/2020
	Webinar on sustainable Building construction.	150	07/10/2020
Year	**Name of the Seminar**	**Number of Participants**	**Date From – To**
	Nature and biotechnology.	150	18/11/2020
	ASCE Student Chapter initiation, Expert talk	150	15/12/2020
	Interaction with Industry Expert -Topic: Construction Project-Stages and Challenges in Execution.	150	18/12/2020

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2020 - 2021	Waste Water Management S	110	16/01/2021
	"Introduction To RTL Design And Industrial Opportunities"	25	16/01/2021
	One day Webinar on Effective Communication, Interpersonal skills and Presentation Skills	67	16/01/2021
	#CIVIL VIBES 2: Webinar series on Interaction with Industry Expert -Topic: Importance of Project management in construction	150	22/01/2021
	#CIVIL VIBES 3: Webinar series on Interaction with Industry Expert -Topic: Transportation system modelling: a broad overview	150	08/02/2021
	Webinar on "Women in Engineering"	40	28/02/2021
2020 - 2021	Castellos Inauguration and Expert talk on Civil Engineering: Building a better future	150	12/03/2021
	World water day celebration and Expert talk	150	22/03/2021
	Recent Advances in Structural Analysis : an overview	150	30/03/2021
	Identifying Intellectual Property Component at the Early Stage of Innovation	130	12/04/2021
	Webinar on Fourier transforms and it's applications	76	17/04/2021
	BUDS TO FLOWERS-Alumni Talk 2	100	27/04/2021
	#CIVIL VIBES 4: Webinar series on Interaction with Industry Expert -Topic: Advances and Prospects in Solid Waste Mangement	150	30/04/2021

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3.2 Innovation Ecosystem

Year	Name of the Seminar	Number of Participants	Date From – To
	International webinar "From Campus To Corporate"	90	01/05/2021
	Webinar on 5G- Dot/Government of India	20	02/05/2021
	Webinar on"Industry Expectations"	45	15/05/2021
	#CIVIL VIBES 5: Webinar series on Interaction with Industry Expert -Topic: Geospatial Techniques	130	21/05/2021
	Interaction with Entrepreneur	100	29/05/2021
2021-2022	Essence of Mathematics in Engineering & Research settings	145	03/06/2021
	World water day celebration & Expert talk	130	14/06/2021
	Infinite possibilities of GATE and Job opportunities in PSU	130	19/06/2021
	From BUDS to FLOWERS- Alumni talk 3 by Ms Aishwarya Menon	100	19/06/2021
	SIDDHI-Success tips for students S	135	02/07/2021
	From BUDS to FLOWERS- Alumni talk by Ms Varada Jagadeesh	100	31/07/2021

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3.2 Innovation Ecosystem

	GENOMICS, OhMyGene and Next generation Wellness	100	10/08/2021
	My Story-Motivational Session by Successful Entrepreneur/Startup Founder"	86	10/09/2021
	Innovation and Entrepreneurship as career opportunity	86	16/09/2021
	From BUDS to FLOWERS-Alumni talk-5 by Mr Binu Ravindran	100	30/09/2021
	World Food Day webinar	100	20/10/2021

Year	Name of the Seminar	Number of Participants	Date From – To
2021 - 2022	My story- Motivational session by successful innovator	107	20/11/2021
	Expert talk on "2 G Ethanol Technology-Evolving Smart Engineering Concepts for Industry Adaptation"	100	27/11/2021
	Innovation Mindset and Entrepreneurship	42	30/11/2022
	My Story-Motivational Session by Successful Entrepreneur	100	02/05/2022
	Awareness Programme on Intellectual Property Rights	182	18/05/2022
	Alumni interaction series "BUDS TO FLOWERS"	100	24/05/2022
2022 - 2023	Webinar on "BIG Awareness"	100	19/07/2022
	Lean Startup and Minimum Viable Product/Business	69	19/07/2022
	Innovation/Prototype Validation - Converting Innovation into a Startup	60	21/07/2022
	Accelerators/Incubation - Opportunities for Students & Faculties – Early Stage Entrepreneurs	88	25/07/2022
	Prototype/Process Design and Development - Prototyping	55	28/07/2022
	World Heart Day Celebration	100	29/09/2022

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3.2 Innovation Ecosystem

Year	Name of the Seminar	Number of Participants	Date From – To
	Alumni Interaction "Buds to Flowers"	100	28/10/2022
	BUDS to flowers "Alumni Interaction"	100	02/10/2022
Year	**Name of the Seminar**	**Number of Participants**	**Date** **From – To**
2022 - 2023	My story: Motivational Session by Successful Entrepreneur	120	17/10/2022
	One day orientation -Innovation and Developing Entrepreneur Culture- IEDC	20	07/11/2022
	My Story -Motivational Talk by Entreprener	47	18/11/2022
	ETA -Motivational Talk	47	19/11/2022
	Challenges in software engineering seminar	100	19/11/2022
	software development process	100	20/11/2022
	"My Story Motivational Session By Successful Entrepreneur	70	22/11/2022
	Seminar Series Recent Advancements In Civil Engineering	24	25/11/2022
	Seminar on Industrial Safety & Awareness	20	25/11/2022
	object oriented concepts using java	60	30/11/2022- 01/12/2022
	Toyota Hybrid Vehicles	100	20/12/2022
	Seminar on How to Write and Publish a Paper	20	03/03/2023
	Report -Talk on Startups	90	04/05/2023
	Talks on startups	150	04/05/2023
	Group Dynamics in startups	130	22/05/2023
2023 - 2024	One week webinar on Robotics and AI	55	31/07/2023- 07/08/2023
	Accelerators/Incubation- Opportunities for Students & Faculties- Early-Stage Entrepreneurs	70	23/08/2023
Year	**Name of the Seminar**	**Number of Participants**	**Date From – To**
2023 - 2024	A webinar on Recent trends in VLSI design- industry perspective	67	23/08/2023
	Elevating Expectations: A Presentation on Construction Safety in India	150	13/09/2023
	Theory Vs Practical in Civil Engineering	150	18/09/2023
	A Path to Entrepreneurship and Role of IEDCs	40	25/09/2023
	Motivation and Career Guidance on Crafting a bright future for Electrical Engineers	72	08/11/2023

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3.2 Innovation Ecosystem

	Awareness on Electrical licensing and Safety measures	70	23/11/2023

Year	Name of the workshop/ seminar	Date From – To	Link to the Activity report on the website
2019	Innovative Design and Product Development	8/07/2019-12/07/2019	https://sbce.ac.in/news/ktu-sponsored-fdp-on-innovative-design-a
2019	Awareness of Intellectual Property Rights (IPR) and its Relevance in Research	29-01-2019	https://sbce.ac.in/wp-content/uploads/2019/07/3.2.2.1-iedc-progr
2019	2-day workshop on Innovation, Leadership and Creativity named as Slate n Pencil	26 and 27 January 2019	https://sbce.ac.in/wp-content/uploads/2019/07/3.2.2.1enterpreneur-
2019	Quality Management	8/2/2019	https://sbce.ac.in/wp-content/uploads/2019/07/3.2.2.1enterpreneur-
2019	Cyber Security	3/25/2019	https://sbce.ac.in/branches/activities-4/
2018	International Standards and the Fourth Industrial Revolution	15/10/2018	https://sbce.ac.in/branches/activities-4/
2018	Remote Infrastructure Management – Past and Future	21/11/2018	https://sbce.ac.in/wp-content/uploads/2019/07/2016-2.pdf
2018	MEET THE ENTREPRENEUR PROGRAMME	11/7/2018	https://sbce.ac.in/wp-content/uploads/2019/07/3.2.2.1enterpreneur-
2018	Latex and Technical Writing	28/09/2018	https://sbce.ac.in/branches/activities-4/

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3.2 Innovation Ecosystem

2018	ENTREPRENEURSHIP AWARENESS PROGRAMME	18/09/2018	https://sbce.ac.in/wp-content/uploads/2019/07/2016-2.pdf
2018	Professional Ethics	3-8-2018	https://sbce.ac.in/wp-content/uploads/2019/07/3.2.2.1professional-e
2018	WOMEN EMPOWERMENT THROUGH ENTREPRENEURSHIP	26-07-2018 to 27-07-2018	https://sbce.ac.in/wp-content/uploads/2019/07/3.2.2.1enterpreneur-
2018	Innovation and Product Development	7-2-2018	https://sbce.ac.in/branches/activities/
2018	Ethical Hacking	3-3-2018	https://sbce.ac.in/branches/activities-4/
2018	Managerial and Entrepreneurial Workshop-organised by IEEE Chapter SBCE-INITIUM'2K18	30-01-2018	https://sbce.ac.in/branches/activities-3/
2018	Android Application Development	19/01/2018 - 20/1/2018	https://sbce.ac.in/branches/activities-4/
2018	Technical Skills	20 February - 18 March 2018	https://sbce.ac.in/branches/activities-4/

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3.2 Innovation Ecosystem