

3.2.1 Details of grants received from Government and Non-governmental agencies for research projects, endowments, Chairs in the institution during the year (INR in lakhs), 3.2.2 Details of teachers having research projects during the year & 3.2.4 Details of Departments having research projects funded by Government and/or Non-government agencies during the year

Name of the Principal Investigator/ Co-Investigator (if applicable)	Name of the Funding Agency	Funds provided (INR in lakhs)	Duration of the Project	Accessible Drive link of e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	Name of the Project/ Endowment/Chair
Prof. G. S. Taki	UGC DAE CSR	0.45	3years	https://drive.google.com/file/d/1z7yq594ShUOyMIYPV9pxpG6NZPa-JFOh/view	Investigation of magnetic properties of ion beam irradiated graphene as potential spintronic material
Prof. Darothi Sarkar	The Institute of Engineers (India)	0.43	8 months	https://drive.google.com/file/d/1KGhxfPMD8vnqj-kjS7S4AKUBTTVnz52_/view?usp=sharing	Friskus - A Driver Drowsiness Detection and Accident Prevention System
Prof. Kakoli Dutta	Institute of Engineering & Management	1.2	1year	https://drive.google.com/file/d/1K6kthJxtjFT3Z-PoRC9CjOCAJuSplL2/view?usp=drive_link	Development Of Edible Biofilm From Various Plant and Microbial Sources and Incorporation of Bioactive Compound as Nano-Emulsion
Prof. Swati Choudhury	Institute of Engineering & Management	3	1year	https://drive.google.com/file/d/1Ngu9kH08Cnz2YUMFN9m-JhbKAAamb-O9/view?usp=drive_link	Intelligent Emotion Recognition System
Prof. Samapika Das Biswas	Institute of Engineering & Management	5	1year	https://drive.google.com/file/d/1Kr60tITHhfeq54820yxuSGiE7mFahIjQ/view?usp=drive_link	Revolutionizing Psychological Assessment: An Advance Software Platform for Standardized Psychological Testing
Prof. Tanima Bhowmik	Institute of Engineering & Management	3.5	1year	https://drive.google.com/file/d/1bcYin-9jLp2fNAZr9SHuXIQ-gxs46VSs/view?usp=drive_link	UAV Assisted Crop Monitoring and Management for Precision Agriculture

Prof. Supratim Ghosh	Institute of Engineering & Management	2	1year	https://drive.google.com/file/d/1sYUS3z2dpd0mkfPJ4k_OZkc9Fn5w6Me0/view?usp=drive_link	Smartphone-Based Biomaker Analysis of Diabetic Retinopathy From Time- Varying Retinal Videos
Prof. Dipak Saha	Institute of Engineering & Management	0.5	1year	https://drive.google.com/file/d/1dbNi4_6jl5SHz8jnC3AD6_vw5ow-v1oi/view?usp=drive_link	Market Orientation and Marketing Effectiveness in Business Schools Program in West Bengal and Delhi NCR Region: A Sustainable Bran Building Exercise
Prof. Bikash Choudhuri	Institute of Engineering & Management	2	1year	https://drive.google.com/file/d/1ciNme8ID7TwtjnDDWvUDaKbZ4RxTvB68/view?usp=drive_link	Multipurpose Mini Electric Plough for Small Scale Farming
Prof. Suman Sarkar	Institute of Engineering & Management	5.3	1year	https://drive.google.com/file/d/1eig8v_WsADO3kJUhta8UG9oIBKsJPMBc/view?usp=drive_link	DFT triggered NO2 Sensing Using Vander Wall Hetero Monolayer
Prof. Sanjoy Mondal	Institute of Engineering & Management	6.2	1year	https://drive.google.com/file/d/1JsvCEHJew2hCoCQbAhKz3EqW2NM62iV-/view?usp=drive_link	Design an improved maximum boost control technique for CDBC-based three-level ZSI
Prof. Phani Bhushan Ghosh	Institute of Engineering & Management	5.9	1year	https://drive.google.com/file/d/1n2yUvZvgCHf8i1wxLgs-iMJwjrOkdgPs/view?usp=drive_link	Design a methodological approach to the establishment of sustainable agricultural ecology in drought vulnerable areas of eastern India.
Prof. Saswati Barman	Institute of Engineering & Management	25	1year	https://drive.google.com/file/d/1AKSCCEPduuv5jFaBrNNocJqviFAS7O44/view?usp=drive_link	Design and analysis of Frequency Tunability of Spin-Torque Vortex Oscillator in Permalloy Nanodisks with Modified Material Properties

Prof. Gobinda Sen	Institute of Engineering & Management	7.8	1 year	https://drive.google.com/file/d/1mZcJkF8dzhBr4Oxeg9APjGPFmNi6wN3H/view?usp=drive_link	Design and performance analysis of wide inter-absorption dual-transmission dual-polarized frequency selective rasorber based on SRRs
Prof.Sutanu Ghosh	Institute of Engineering & Management	8.5	2 years	https://drive.google.com/file/d/1xP2TcHVYk6HG8no5QHRsF5pRBm8Oa-RR/view?usp=drive_link	Performance Optimization of Two-Way Hybrid VLC/RF-Based IoT System Over Cellular Spectrum
Prof. Rijuparna Chakraborty	Institute of Engineering & Management	7.75	1 year	https://drive.google.com/file/d/1ARU34MBo0GYvebWZBXwIPg-B2LL8d5Rv/view?usp=drive_link	Design and performance analysis of propagation-invariant, quasi-propagation-invariant beams and coordinate axicons
Prof. Rahul Baidya	Institute of Engineering & Management	8.2	2 years	https://drive.google.com/file/d/1zuFg7IVPmvGDN7MGfs2i3MQoztZDV2ak/view?usp=drive_link	Disposal of hazardous industrial waste in cement kiln – A pilot study of acid tar sludge
Prof.Sandip Kumar Chaudhury	Institute of Engineering & Management	5.1	1 year	https://drive.google.com/file/d/1pqAgZE_iPtG8GWAUNzpEZXYnCs5cMTI/view?usp=drive_link	Design an Electro Discharge Machining of Advanced Engineering Ceramics
Prof. Nirmal Das	Institute of Engineering & Management	6.3	1 year	https://drive.google.com/file/d/16CowuBuRHnHzJER0VK2nKqUTsqWymF0o/view?usp=drive_link	Designing of a synergistic integration of deep learning and fuzzy water flows for fine-grained nuclei segmentation in digital pathology
Prof. Amartya Mukherjee	Institute of Engineering & Management	10.4	2 years	https://drive.google.com/file/d/155UC3H5cWv2mAQk76RS_rjZyTNq5TxF/view?usp=drive_link	Design a DisastDrone in Ultra-Low Latent 6G Network

Prof. Ayan Kumar Panja	Institute of Engineering & Management	8.9	2 years	https://drive.google.com/file/d/1zLo4eww8HGjleNrfASTzeWH4ln1m6fW1/view?usp=drive_link	Paving the way with machine learning for seamless indoor-outdoor positioning
Prof. Sainik Kumar Mahata	Institute of Engineering & Management	3.2	1 year	https://drive.google.com/file/d/1Vr6lDW2bxrbutNfO8op1vh22lZLd6OsU/view?usp=drive_link	Design a system for simplification of English and Bengali Sentences for Improving Quality of Machine Translation
Prof. Sukanya Mukherjee	Institute of Engineering & Management	6.2	1 year	https://drive.google.com/file/d/1p6PPuhMgowy19XrY1tPc8cXaXJsQU0YW/view?usp=drive_link	Exploring Reachability Tree for Non-uniform Cellular Automata Under Open Boundary Conditions.
Prof. Atanu Panda	Institute of Engineering & Management	6.75	1 year	https://drive.google.com/file/d/17yyHqT3bGratP6ge6pd7AG7r-xGmzVxd/view?usp=drive_link	A model-based tracking control scheme for nonlinear industrial processes involving joint unscented Kalman filter
Prof. Sanchita Ghosh	Institute of Engineering & Management	5.45	1 year	https://drive.google.com/file/d/1n4bPaG1klNelf83t9w0DvzJTmrZKSQKH/view?usp=drive_link	Design a system for application of Robotics in Medical Domain
Prof. Susovan Jana	Institute of Engineering & Management	6.48	1 year	https://drive.google.com/file/d/1aiv11Jq7VrEQyecijzlvWGGKuu1qTcVz/view?usp=drive_link	An integrated framework for quality evaluation of fruits and vegetable store located in the supermarket under utopian environment
Prof. Anupam Bhattacharya	Institute of Engineering & Management	4.53	1 year	https://drive.google.com/file/d/1jn4s-xvRKE4fIMnnKUrmyXZrj9Q-IHNL/view?usp=drive_link	Design a system for evaluation of Management Students' Attitude & Perception regarding Online Pedagogy towards Attaining Sustainable Development Goals during Covid-19

Prof. Arkaprava Chakrabarty	Institute of Engineering & Management	6.72	1 year	https://drive.google.com/file/d/1u_BjGamt00L-H0XV8mG_119icC2_g95y/viiew?usp=drive_link	Effectiveness of Measurement of Volatility Through Moving Average Envelope and Bollinger Bands in Stock Price Movements in Indian Market using smart system
Prof. Priyanka Das	Institute of Engineering & Management	8.75	2 years	https://drive.google.com/file/d/1i4Rsg5NaQNLUxxscNa-ySpZXUEOU9vso/view?usp=drive_link	Design a Graph based ensemble classification for crime report prediction
Prof. Goldina Ghosh	Institute of Engineering & Management	5.67	1 year	https://drive.google.com/file/d/1R6cawp2j5aT_-jg1MyAcrxX72lAwHyHE/view?usp=drive_link	Biomechanical analysis of the novel S-type dynamic cage by implementation of teaching learning based optimization algorithm
Prof. Malay Gangopadhyay	Institute of Engineering & Management	20	1 year	https://drive.google.com/file/d/1kb5TIO1GMUKHB4_fOuz2HpeV8Hb1Gzr1/view?usp=drive_link	Development of BEEs App
Prof. Sourav Mukherjee	Institute of Engineering & Management	12	1 year	https://drive.google.com/file/d/1jpNCdb3NHmVmCKpfXOyHvqBUq97ArQ0X/view?usp=drive_link	Maintenance of IEMCRP
Prof. Subhamoy Ray	Institute of Engineering & Management	20	1 year	https://drive.google.com/file/d/1ApT68uoo19CsQP35NQcGkT9mhsgpFMcu/view?usp=drive_link	Development of solar panel based water spraying machine
Prof. Subhajit Kar	Institute of Engineering & Management	10.3	2 years	https://drive.google.com/file/d/18Mg6E7kA_ydBFCRdUEJMN18PeLwDvvIO/view?usp=drive_link	Design a system for classification of cancer subgroups employing PSO and adaptive K-nearest neighborhood technique
Prof. Subhabrata Banerjee	Institute of Engineering & Management	9.8	2 years	https://drive.google.com/file/d/18MsSIDNjwcb1K4wGebTe8d0pY6HWYwCL/view?usp=drive_link	Efficient Turbo code design for 5G

Prof. Sanghamitra Poddar	Institute of Engineering & Management	8.4	2 years	https://drive.google.com/file/d/1QZ6Aa9RVsCntqurtlfNrKIoauBWq0vNt/viiew?usp=drive_link	Optimized maintenance productivity of Indian railway coach and bogie using metahuristic approach
Prof. Srijita Chakraborty	Institute of Engineering & Management	4.8	1 year	https://drive.google.com/file/d/14MKzEfZei2vnCqJHepIHdmBVQpYbZew/viiew?usp=drive_link	Semi circular ultrawide band antenna design with a slotted ground plane
Prof. Mili Sarkar	Institute of Engineering & Management	2.3	1 year	https://drive.google.com/file/d/1IG3_OOaS1GIEQyWTjBIBBTp4lb1INcsG/viiew?usp=drive_link	Design of Partially Depleted Silicon-on-insulator MOSFET
Prof. Ratna Chakraborty	Institute of Engineering & Management	3.4	1 year	https://drive.google.com/file/d/1XeOvQ-4IcyTRYPO_w092CyoYXu9AAAd/view?usp=drive_link	Design of a fault free inverter circuit using minimum number of cells & related kink energy calculation in quantum dot cellular automata
Prof. Subhajit Adhikari	Smart Society	6.4	1 year	https://drive.google.com/file/d/12PZQnREkxXWVT9vJ1E7dHshqGkrYqA1l/view?usp=drive_link	Design a Competent Image Encryption Method Using Henon-Logistic-Tent Chaotic Pseudo Random Number Sequence
Prof. Biswadip Basu Mallik	Smart Society	5.8	1 year	https://drive.google.com/file/d/16-CERIVjDSCJdxMjqRH5G_OOFoHssbvR/view?usp=drive_link	Arsenic and Copper Contaminant Transport Modelling In Xaysomboun Province, Lao Pdr
Prof. Subarna Datta	Smart Society	5.7	1 year	https://drive.google.com/file/d/1n7m03ICIEV_aBKK3w5snWfwt1h42jOI1/viiew?usp=drive_link	Design and analysis of the origin of orthorhombic phase stabilization in Gd-doped HfO2 and DFT

Prof. Abhijit Kargupta	Smart Society	3.2	1 year	https://drive.google.com/file/d/1PlIq7b8iKcs03DU_lmhjw-9E7i3g98_1/view?usp=drive_link	In Silico Analysis of Pharmacokinetics of Synthetic Dyes Used in Food and drugs
Prof. Arnab Basu	Smart Society	6.13	1 year	https://drive.google.com/file/d/13Hedaqb_ou9sqi1HwbGOLFY-102ZdSiV/view?usp=drive_link	Exploration of Magnetocaloric Effect in a New Perovskite Oxide La _{0.7-x} Ho _x Sr _{0.3} MnO ₃ (x=0.2 and 0.3)
Prof. Soumyadipta Pal	Smart Society	4.95	1 year	https://drive.google.com/file/d/1rZiFc6F-gdz3zF6YuvlCnEGJFL9NGe9m/view?usp=drive_link	A comprehensive investigation on Magnetocaloric Triggered New Perovskite Oxide
Prof. Ranabir Banik	Smart Society	8.28	2 years	https://drive.google.com/file/d/1j4rj0Eemg-TGACTuXOHUWkFc0-leg7XR/view?usp=drive_link	Analysis of the low- and medium-spin level structure in 77As
Prof. Subhamoy Banerjee	Smart Society	7.46	1 year	https://drive.google.com/file/d/1HOZRYdfOCvL6-WjflbHvjyQ1eNM52Wrg/view?usp=drive_link	Delineate relationship between type 2 diabetes mellitus and triple negative breast cancer using Network pharmacology approach
Prof. Arunava Mukhopadhyay	Smart Society	4.25	1 year	https://drive.google.com/file/d/1XywdU13t8F2hVKiOE3t2RoUW3wEFGGpl/view?usp=drive_link	Analysis the effect of EBG on Microstrip Patch Antenna
Prof. Samit Karmakar	Smart Society	4.75	1 year	https://drive.google.com/file/d/1g0VgNgZBWNGLAYb9Q16KiIMJMUSldr2g/view?usp=drive_link	Design and Analysis of Microstructural Characteristics of ECR Plasma Etched and Heat Treated Commercial Copper Foil

Prof. G. S. Taki	Smart Society	8.78	2 years	https://drive.google.com/file/d/1kCPyt4W9RiSjwTpHwPOWXRCsLiT6IUp7/view?usp=drive_link	COVID-19 prophylactic & management studies based on Electro-Homeopathy
Prof. Indrajit De	Smart Society	5.6	1 year	https://drive.google.com/file/d/1t6nHbNm8WE1AXohSM9qCuLKbixgDIbUG/view?usp=drive_link	Human Posture Recognition by Distribution-aware coordinate representation and Machine Learning
Prof. Dwaipayan De	Smart Society	7.95	2 years	https://drive.google.com/file/d/1ppEbLW3fCN4veI0k-DFxFUxv9CUT5Bp/view?usp=drive_link	Analysis of Machining Characteristics During WEDM of Titanium Matrix Composite
Prof. Joydip Ray	Smart Society	5.45	1 year	https://drive.google.com/file/d/1aHPFzBaUkFvCW-v5KS4gclm6fApcd5V5/view?usp=drive_link	An exhaustive analysis of TIG cladding process and its comparative study with laser surface treatment
Prof. Ishita De	Smart Society	6.45	1 year	https://drive.google.com/file/d/1qtsLRkEYkzQBjTtrYRDxJsxsez1hFN/view?usp=drive_link	Design and analysis of Dynamic Swivelling Torque and Eccentricity on the Design of Compensator Cylinders for a Variable Displacement Axial Piston Pump–Modelling & Simulation
Prof. Sohini Datta	Smart Society	5.48	1 year	https://drive.google.com/file/d/1xv-sV5RWVL5PxLqTfr9SkPx_V0Qrgmgh/view?usp=drive_link	Students' Perception & Attitude regarding Management

Prof. Soumik Gangopadhyay	Smart Society	6.45	1 year	https://drive.google.com/file/d/1HcisYwC3nNvg4Y6W2S-V-cnSDYQDA4g_/view?usp=drive_link	Transitory Perceived Value of Health Risk Since Pandemic
Prof.Arindam Roy	Smart Society	5.95	1 year	https://drive.google.com/file/d/1OaI5YE975IyfvhJhV-MX1tJkMMSKnUia/view?usp=drive_link	How the Situational Factors Impact the Consumers to Buy Food and Grocery Products Impulsively? A Comprehensive Analysis the Organized Retail Formats of Kolkata
Prof.Abhishek Bhattacharya	Smart Society	7.45	2 years	https://drive.google.com/file/d/1LDYW15_V6kE2gsMLjx3VrpVch23hv3DC/view?usp=drive_link	Fractal Dimension-Based Infection Detection in Chest X-ray Images
Prof.Swarnendu Ghosh	Smart Society	5.48	1 year	https://drive.google.com/file/d/1AhJQZm92Glu_b_gQWiGteF_Vy3ypvey9A/view?usp=drive_link	Generating Holistic Scene Graphs from Regional Dependencies using Im2Graph Approach
Prof.Swagatam Basu	Smart Society	6.45	1 year	https://drive.google.com/file/d/1IMjAWZg0JkYRIF9zQrXyi21jSXRauQex/vi ew?usp=drive_link	MLWR-2PAKA with Rounding-Based Authenticated Key Agreement Protocol for Two-Party Communication
Prof.Priti Deb	Smart Society	5.2	1 year	https://drive.google.com/file/d/1fmj0ZVnsPbvd uwfbsVu6ZyRLCPRT7h8l/vi ew?usp=drive_link	Fog computing-based beam allocation and co-operative task distribution model for green 5G mobile network

Prof.Sharmistha Ghosh	Smart Society	4.6	1 year	https://drive.google.com/file/d/13F626l2SaTBVCbg1dFL3P1OcNRK_mied/view?usp=drive_link	Early Stress History Alters Serum Insulin-Like Growth Factor-1 and Impairs Muscle Mitochondrial Function in Adult Male Rats
Prof.Santanu Das	Smart Society	4.8	1 year	https://drive.google.com/file/d/1y-jfgYF8lNehN8luaT8sowJ421n5Zptw/view?usp=drive_link	Design a System Approximations for period-1 rotation of vertically and horizontally excited parametric pendulum
Prof.Krishanu Deyasi	Smart Society	4.3	1 year	https://drive.google.com/file/d/1FvyJe55lz4Ob77XG1UCPD-3p5JHKNNw7/view?usp=drive_link	Approach for Evaluation of Network similarity and statistical analysis of earthquake seismic data
Prof.Ruhira Mukherjee	Smart Society	5.1	1 year	https://drive.google.com/file/d/12kdR75oBFiZBKAZoEL7sECprBf0iENwB/vi ew?usp=drive_link	Solar Energy and Ways to Improve its Economic Viability and New Business Scopes-Review
Prof.Subhamoy Banerjee	Smart Society	6.85	1 year	https://drive.google.com/file/d/1Ocr0zzppvdlj3Rwffd9yGfnmV_EiPPLD/view?usp=drive_link	Medical Cannabis and the Effects of Cannabinoids on Fighting Cancer, Multiple Sclerosis, Epilepsy, Parkinson's, and Other Neurodegenerative Diseases
Prof.Madhumita Pal	Smart Society	7.43	2 years	https://drive.google.com/file/d/1QDqGGcedyTKleS3waCO3MUXkwCJLqfdh/view?usp=drive_link	Accurate and Efficient Algorithms for Star Sensor Based Micro-Satellite Attitude and Attitude Rate Estimation

Prof.Ranjita Chowdhury	Smart Society	6.48	1 year	https://drive.google.com/file/d/1mf0scbp4zQgn8lUFUwkypjEU1Qazjibib/view?usp=drive_link	Optimum Positioning of Electric Vehicle Charging Station in a Distribution System Considering Dependent Loads
Prof. Deepsuhra Guha Roy	Smart Society	5.46	1 year	https://drive.google.com/file/d/1z-70zkHNbnavsJpOSjNWYofrxkAwOJK-/view?usp=drive_link	Smart Evolution on AI-Based Cyber-Physical System Using Blockchain Techniques
Prof. Indranil Basu	Smart Society	4.8	1 year	https://drive.google.com/file/d/1eYnUVqt9FYgDd5dlrlaNZO3I81yleF0w/view?usp=drive_link	Strategy for Margin Trading Based on Algorithm
Prof. Amit Kumar Das	Smart Society	7.6	2 years	https://drive.google.com/file/d/1mhv4EkgyE4XJlCaTnrNfD5rGiASdFUOw/view?usp=drive_link	An emerging change in FANET – an Exhaustive Analysis
Prof. Rintu Kumar Gayen	Smart Society	6.8	1 year	https://drive.google.com/file/d/1gPQ4N5IEqpYgmg9_vGmiX92eRClFmesn/view?usp=drive_link	Determining tree height and width using GPS-enabled UAV imagery
Prof.Pratik De Sarkar	Smart Society	3.8	1 year	https://drive.google.com/file/d/1-I5FAtcefPDZOUyP_hKkoklYvESsfXx/view?usp=drive_link	Design and Simulation of Higher Efficiency Perovskite Heterojunction Solar Cell Based on the Cell Performances with Different Standard HTLs
Prof.Rajat Shubhra Pal	Smart Society	4.6	1 year	https://drive.google.com/file/d/1jDWGdewHQz0iQfij54fkW2rJOvo0TxvZ/view?usp=drive_link	Investigation on the Occurrence of Ferroresonance with the Variation of Degree of Transformer Core Saturation

Prof. Debashis Jana	Smart Society	5.43	1 year	https://drive.google.com/file/d/139pfgWHvSXueAP_tybLwXU4mFq1Oi4Qt/view?usp=drive_link	Performance Analysis of Radial Distribution System Considering Network Penetration and Placement Impact of Distributed Generators
Prof. Subrata Chattopadhyay	Smart Society	6.8	1 year	https://drive.google.com/file/d/1XOM_tehDUJqlulaCfTOvLNKIKsS_BX7t/view?usp=drive_link	Transformational, transactional, and laissez-faire styles of teaching by faculty as predictors of satisfaction-evidence from higher education institutions of WB
Prof. Saikat Chakrabarti	Smart Society	6.4	1 year	https://drive.google.com/file/d/1JV5yyv_55IYOwXggPr4YL-OfR-8sLXtN/view?usp=drive_link	Design a System for Binary Fuzzy Goal Programming for Effective Utilization of IT Professionals
Prof. Kaushik Kumar Ganguly	Smart Society	4.8	1 year	https://drive.google.com/file/d/1gB4_8AFQgEduNqC7yMpHNhoeNujA5gk/view?usp=drive_link	Colour as a marketing tool: An Exhaustive Analysis
Prof. Monalisa Dey	Smart Society	4.6	1 year	https://drive.google.com/file/d/1YLL7FLswt5Gm2EMV_F8GDi2Vv-d5ynT8/view?usp=drive_link	An annotation system of a medical corpus using sentiment-based models for summarization applications