INDUCTION PROGRAM REPORT

2023-2024

Theme of the event: Dr B C Roy- A visionary of India

DR. B. C. ROY ENGINEERING COLLEGE, DURGAPUR

Ref: BCREC-BCR/PR/2023 **DATE: 10-08-2023**

OFFICE ORDER

Subject: **Induction Programme 2023 on August 17th – 20th September, 2023.**

It has been resolute that the **Induction Programme 2023** for new comers will be held this year from **August 17th – 20th September, 2023.** To systematize the programme in a befitting way, a Core Committee with the following terms has been finalized as under:

Working Committee:
Shri. Tarun Bhattacharyya (General Secretary, BCREC group of Institutions)
Prof. (Dr.) Sanjay S. Pawar, Principal, BCREC
Prof. (Dr.) Khondekar Mofazzal Hossain, Vice Principal, BCREC
Prof. (Dr.) Arindam Mondal, Registrar , BCREC
Prof. (Dr.) Aloke Kahali, Head (Admn.), BCREC
Prof. (Dr.) Rajdeep Ray, Dean(SW), BCREC
Shri. Amitava Chakravarty, Chief (Corporate Affairs), BCREC group of Institutions

Convener: Prof. Biswajit Mondal, BCREC
Joint Convener: Prof. (Dr). Shashi Bajaj Mukherjee, BCREC
Treasurer: Prof. Soumyadeep Das, BCREC

Core Committee:
Prof. (Dr.) Rajdeep Ray, Dean(SW), BCREC
Prof. Priyanka Roy, AP/IT
Prof. (Dr.) Taniya Chakraborty, AP/BSH
Prof. Joyjit Patra, AP/CSE
Shri. Amitava Ghosh, Manager, PR
Shri. Ravi Sharma, Sr. Manager (Finance), BCREC group of Institutions
Shri. Rajesh Chatterjee, Sr. Manager (Admn.), BCREC group of Institutions
Shri. Shouvick Kr. Chandra , Sr. Manager (Public Relation), BCREC group of Institutions
Shri. Upendra Kumar Sharma, Sr. Manager, (Corporate Affairs & Estate), BCREC group of Institutions

Committee Members: -

Prof. Anandaprova Mazumdar, AP/CSE	-	Member
Prof. Soumen Biswas, AP/EE	-	Member
Prof. (Dr.) Sukalpa Dey, AP/BSH	-	Member
Prof. (Dr.) Sourav Paul, AP/EE	-	Member
Prof. (Dr.) Sneha Sultana), AP/EE	-	Member
Prof. Monalisa Chakraborty, AP/CSE	-	Member
Prof. Banashree Chatterjee, AP/IT	-	Member
Prof. Sukarna Dey Mondal, AP/BSH	-	Member
Prof. Jaya Mukherjee, AP/BSH	-	Member
Prof. Rajib Mondal, AP/CSE	-	Member
Prof. Swadhin Kumar Mondal, AP, CSE	-	Member
Prof. Siddhartha Ghosh, AP, EE	-	Member
Prof. Sunil Kumar Chowdhury, AP, EE	-	Member

Dr. B. C. ROY ENGINEERING COLLEGE Durgapur

The above committee member may include any other faculty, staff and student accordingly to organize the programme successfully.

Principal
Dr. B. C. Roy Engineering College
DURGAPUR

Prof. (Dr.) Sanjay S. Pawar
Principal
BCREC, Durgapur

DR. B. C. ROY ENGINEERING COLLEGE ★ Durgapur

Dr. B.C Roy Engineering College, Durgapur

Date: 11-Aug-2023

To: General Secretary ,BCREC Society

From: Convenor, Induction Program

Sub: Request for Budget Approval for Induction Program 2023.

Dear Sir,

This is to inform you that the **Induction Program 2023** is going to be held **from 17th August 2023 to 20th September 2023**. A committee has been formed for the same, which will look after the activities & events for that program. For conducting the program successfully, an amount of **Rs. 66000/- (Sixty-Six Thousand Only)** in the following heads;

Sl No.	Budget Head	Tentative Amount (Rupees)
1	Banner	3000
2	Honorarium & Gifts for the Guests	26000
3	Refreshments for the Guests	7000
4	Decoration	15000
5	Reward and Appreciation	10000
6	Miscellaneous	5000
		Total – Rs. 66000 (Only)

Therefore, it is requested to kindly sanction the amount of Rs. 66000/- (Sixty-Six Thousand Only).

Forwarding office	Remarks	Comments by other offices required for clarifications/comment	Signature with Date
Convenor, Induction Program 2023	Need the amount to conduct the Program.		11.08.23
Registrar	Guest list along with designation may please be submitted for further consideration.		11/8/2023
Vice Principal	Submitted for kind Approval		11/8/2023
Principal	Recommended for Induction Programme		11/08/2023
General Secretary	Approved		11/8/2023

DR. B. C. ROY ENGINEERING COLLEGE, DURGAPUR
ROUTINE FOR B-TECH FIRST SEMESTER INDUCTION PROGRAM, 2023-2024 (ODD)

DAY	Time 10:30a.m. – 1p.m.		2.15p.m.- 4.30p.m.
17.8.23	1. Welcome Address: Dr. Sanjay S. Pawar 2. Deliberation by Dr. Saikat Maitra (Different dimensions and scope of higher education after B.Tech.) 3. Vote of Thanks by Mr. Amitava Chakroborty, Chief(Corporate Affairs)		1. Importance of Coding in Engineering: Prof. Subrabrata Choudhury(NIT, Durgapur) (Time 2:30-3:30) 2. Ethics: Mr. Arup Roy Choudhury, CGM(VIGILANCE), SAIL (Time 3:30-4:30)
18.8.23	Dr. D. Dutta (Senior Scientist BARC) (Time 11:00-01:00)		1. Yoga: Mr. Tarun Mukherjee 2. English Test (Time 2:30-3:30) at VB building Class Room 3. Maths Test (Time 3:30-4:30) at VB building Class Room
21.8.23	1. AICTE IDEA Lab: Dr. Mrinmoy Chakraborty (Time 10:30-11:15) 2. Digital Revolution: Dr. Anshuman Sett, CEO-NIHT(Time 11:15-01:00)		UHV: Dr. Gour Sundar Mitra Thakur (Time 2:15-3:15)
22.8.23	1. Registrar Section: Dr. Arindam Mondal (Time 11:00-11:15) 2. EXAM CELL: Prof. Subhashish Pal - I/C (Time 11:15-12:00) 3. MAR: Dr. Tapas Mondal (Time 12:00-12:30) 4. MOOCS: Dr. Tribeni Prasad Banerjee (Time 12:30-01:00)		Art of Living: Live and let live - let's unite the world through drama by Mr. Sumit Bandyopadhyay (UDAN, Asansol) (Time 2:30-4:30)
23.8.23	1. English: (Face your Fear of speaking English) Prof. Sri Krishan Rai (NIT Durgapur) (Time 11:00-12:45) 2. English Test (Time 12:45-01:00)		1. Mathematics: Mother Tongue of Engineering(Dr. S. B. Mukherjee) (Time 2:30-3:30) 2. Maths Test (Time 3:30-4:30)
24.8.23	1. EDC: Prof. Krishna Roy (Time 10:30-10:50) 2. NCC: Prof. Sarabjit Lahiri (Time 10:50-11:20) 3. NSS: Prof. Sohini Ghosh (Time 11:20-11:40) 4. CHAPTERS & CLUB(All 9 Chapters)* (Time 11:40-01:00)		1. Dr. Debasis Bandyopadhyay VC KNU (Time 2:15-3:00) 2. Music club: Dr. Rajdeep Roy (Time 3:00-4:30)
25.8.23	1. Mr. Rohan Chhetri(IT 2010) (Time 11:00-12:00) 2. Mr. Ranadip Paul (ME08) (Time 12:00-01:00)		1. Mr. Suman Chatterjee - ECE 2007 (Time 2:30-3:30) 2. TPO: Mr. Atanu Maity & Prof. Prabal Sahu (Time 3:30-4:30)
13.9.23			Students activity
20.9.23			Football Match, Grand celebration

Theme of the event: Dr B C Roy- A visionary of India.

N.B. 1 - All Faculties who are taking class in 1st Semester will report Dr. Shashi Bajaj Mukherjee (9433315145) at their scheduled class time in Central Routine for the period 17.08.23 - 25.08.23

N.B. 2 – New addition in Induction Committee – 1.Mr. Deepraj Mondal (TPO), 2. Prof. Arka Banerjee, AP, CE

* 1. IEEE student branch, Dr. Rajib Banerjee, 2. IETE, Student chapter, Dr. Debipriya Dutta, 3. ACM club, Dr. Chandan Bandyopadhyay, 4. IEI(I) chapter, Bappaditya Das, 5. CSI, Keramot Hossain, 6. ISET chapter, Soumyadip Das, 7. DCodeit club, Dr. Dinesh Pradhan, 8. Robotics and drone club, Subhajit Bhattacharya, 9. Google developer's student club, Atin Mukherjee

Principal
Dr. B. C. Roy Engineering College
DURGAPUR

D. C. ROY ENGINEERING COLLEGE * Durgapur

DAY 1:

INAUGURATION:

"Bright Beginnings: B.Tech First Semester Induction Program"

In a hall pulsating with the energy of new beginnings, the inaugural ceremony of the B.Tech First Semester Induction Program unfolded with the traditional lighting of the lamp. The venue, adorned with the promise of knowledge and discovery, welcomed eager freshmen and esteemed dignitaries to embark on a transformative academic journey.

The lamp, a beacon of enlightenment, mirrored the collective spirit of the incoming class. Its flickering flame not only marked the commencement of the induction program but also embodied the shared commitment to learning, innovation, and the exciting challenges awaiting these budding engineers.

Brief yet impactful, the ceremony set the stage for a dynamic academic adventure, leaving attendees inspired by the warmth of the lit lamp and motivated to embrace the wealth of knowledge that awaited them in their first semester of B.Tech studies.

Date: 17th August 2023

Venue: DM hall

SESSION 1:

Speaker 1: Dr. Sanjay S. Pawar, Principal BCREC–

The Welcome Address for the B.Tech First Year Students, delivered by the Principal, **Dr. Sanjay S. Pawar** was a momentous occasion that set the tone for a transformative journey. The event aimed not only to introduce the newcomers to the academic community but also to install a sense of belonging and preparedness for the four-year course.

The Principal's speech transcended traditional formalities, embracing a tone of warmth and inclusivity. He/she skilfully articulated a vision that extended beyond academic protocols, emphasizing the holistic development of the students during their time at the institution.

The Principal stressed the importance of the students not merely as academic participants but as unique individuals contributing to the fabric of the institution. This approach was designed to foster a sense of belonging from the very beginning, making the students feel integral to the academic community.

The Principal consciously moved away from the typical formalities associated with such events. Instead, the emphasis was on creating an environment where students felt comfortable expressing themselves and engaging with faculty and peers on a more personal level.

A significant portion of the address was dedicated to preparing the students for the four-year journey ahead. The Principal highlighted the challenges and triumphs that awaited them, encouraging a mindset of resilience, curiosity, and an eagerness to learn.

Beyond academic achievements, the Principal underscored the importance of personal growth and character development. The institution, he/she emphasized, was not just

a place of learning but a community committed to shaping well-rounded individuals ready to make a positive impact on society.
The Welcome Address left a profound impact on both students and attendees. Feedback from the students indicated a heightened sense of enthusiasm and motivation. Many expressed gratitude for the Principal's emphasis on the personal aspect of their journey, making them feel seen and valued.
The Principal's approach set a positive and encouraging tone for the academic year, creating a foundation for a supportive and enriching learning environment.

Speaker 2: Dr. Saikat Maitra, Ex VC MAKAUT and Advisor BCREC:–

Dr. Saikat Maitra delivered an insightful deliberation on the various dimensions and scope of higher education after B.Tech. Dr. Maitra addressed common challenges like Fear of Missing Out (FOMO) and emphasized the importance of minimizing distractions. He discussed the value addition in work and introduced the concept of design thinking. Dr. Maitra highlighted the necessity of developing skills in tandem with the regular course, fostering a holistic approach to education. The speech concluded with a powerful reminder to maintain a positive attitude and embody a resilient "Don't Give Up" mentality, leaving a lasting impact on the students. The discourse aimed at inspiring students to develop a holistic approach to their thinking, acting, and approach to their field of study and practices during their B.Tech courses.

Dr. Maitra emphasized the importance of broadening perspectives, urging students to explore different dimensions of their field and understand the vast scope that higher education offers post-B.Tech.
The deliberation provided a stimulating discourse, encouraging students to engage in critical thinking and question the norms, fostering an environment of intellectual curiosity.

Dr. Maitra advocated for holistic development, emphasizing that education is not just about acquiring knowledge but also about developing a well-rounded skill set and a broader worldview.

Students were encouraged to actively participate in various activities and gain hands-on experience in their fields of study. Dr. Maitra highlighted the significance of practical exposure in shaping a comprehensive understanding.

The discourse aimed at instilling the idea that learning doesn't end with B.Tech. Dr. Maitra motivated students to view higher education as a continual process, expanding their knowledge and skills for ongoing success.

Dr. Maitra specifically encouraged students to consider pursuing higher education after B.Tech, showcasing the myriad opportunities for specialization and advanced study in their respective fields.

Guest Speaker - Mr. Amitava Chakroborty, Chief (Corporate Affairs), BCREC:

Prestigious Presence: The presence of Mr. Amitava Chakroborty, Chief (Corporate Affairs), added a touch of prestige to the event.

Appreciation and Acknowledgment: Mr. Chakroborty extended his appreciation and acknowledgment to the assembled students, recognizing the significance of their educational journey and future contributions.

Conclusion:

Dr. Saikat Maitra's deliberation, enriched with insights on higher education, left students inspired and encouraged to think beyond the confines of their B.Tech courses. The presence of Mr. Amitava Chakroborty added a sense of honor to the occasion, reinforcing the importance of the students' academic pursuits and future endeavors. The event successfully sparked a motivation for continuous learning and growth among the student community.

SESSION 2:

Speaker 1: Prof. Subrabrata Chowdhury, Professor NIT Durgapur–

Professor Subrabrata Choudhury, an esteemed faculty member from NIT Durgapur, conducted an enlightening session to impart the critical significance of coding in the realm of engineering. Commencing with an exploration of cutting-edge innovations such as 'industry 4.0,' he illuminated the transformative impact of artificial intelligence and 3D printing on the manufacturing landscape, both in India and globally.

Professor Choudhury seamlessly transitioned into the crux of his discourse, accentuating the reflexive nature coding should assume in the toolkit of every engineer. His assertion that "coding for engineers should be a reflex action" underscored the integral role coding plays in fostering innovation in our modern world.

The lecture delved into thought-provoking questions regarding the implications of artificial intelligence on contemporary society. Professor Choudhury initiated a comprehensive discussion on existential questions, including "why we exist?" and "is technology becoming too intrusive?" This exploration added depth to the understanding of the broader societal impacts of technological advancements.
The interactive nature of the session allowed students to actively participate, and I personally found the discourse engaging and thought-stimulating. During the Q&A segment, I had the opportunity to inquire about the potential dangers of artificial intelligence. Professor Choudhury offered valuable insights, emphasizing the need for regulating AI and setting limits to its capabilities. He also stressed the importance of cross-checking information generated by AI from secondary sources to ensure accuracy and reliability.
In essence, Professor Choudhury's lecture not only cast a spotlight on the paramount importance of coding in engineering but also opened doors to a visionary realm where code serves as the catalyst for innovation. The session served as a bridge between theoretical knowledge and practical implications, leaving students inspired to navigate the ever-evolving landscape of engineering with coding prowess.

Speaker 2: Shri Arup Roy Chowdhury, CGM (VIGILANCE), SAIL –

Shri Arup Roy Choudhury's impactful speech on ethics underscored the vital role ethical principles play in both academic and professional spheres. The address proved to be a pivotal moment for the audience, shedding light on the importance of maintaining ethical standards in college and the intricacies of professional ethics in a work environment.

Commencing with a fundamental definition, Shri Choudhury elucidated that ethics involves rational reflections on what is right or wrong, just or unjust. He delved into the etymology of the term, tracing its roots to the Greek word "ethos," signifying habit. The speaker expounded on professional ethics, emphasizing core pillars such as code of conduct, fairness, transparency, and integrity. He aptly stated, "There is no right way to do a wrong thing," emphasizing the need for ethical practice from the very beginning of one's career.

Real-world examples, such as the "Dieselgate scandal," were discussed to highlight the severe repercussions faced by industries due to ethical lapses. The heavy negative impact on the company's image and the substantial fines incurred served as cautionary tales.

Shri Choudhury's forward-looking approach extended to the future aspects of engineering, exploring advancements in composite material engineering, fractal learning, and automatic cooling. This broadened the audience's perspective on the evolving landscape of their field.

The speech proved not only motivational but also inspirational. Shri Choudhury's erudition was evident during the interactive question-and-answer session, where students had the opportunity to seek clarification and gain deeper insights into ethical considerations.

In his capacity as CGM (VIGILANCE) at SAIL, Shri Arup Roy Choudhury contributed richly to discussions on ethics, providing a nuanced understanding of the ethical considerations that define professional landscapes. The talk left an indelible mark on the audience, instilling a sense of responsibility, ethical awareness, and enthusiasm for upholding ethical standards in their academic and professional journeys.

DAY 2:

Date: 18th August 2023

Venue: DM hall

Speaker: Dr. Debabrata Datta, Senior Scientist at BARC

Dr. Debabrata Datta, a distinguished Senior Scientist from BARC, graced the second day of our induction program, sharing invaluable knowledge and experiences. His session, rooted in diversified and extensive expertise, covered various aspects, leaving a profound impact on the attendees.

Dr. Datta commenced by instilling a research-based mindset, elucidating the significance of activities like paper publication and research-oriented projects during the four-year B.Tech course. He offered insights into choosing research topics, stressing the importance of visualizing and analyzing future trends for impactful research in the next two decades.

The session delved into Dr. Datta's personal experiences, showcasing his problem-solving approach during a visit to a German glass plant. His interdisciplinary thinking, bridging physics and engineering, resolved a design flaw affecting the glass production process, highlighting the importance of lateral thinking in problem-solving.

He shared a unique aspect of his PhD journey, where he obtained his degree without paper publications, emphasizing the transformative impact of developing three groundbreaking AI software for BARC. These software, focused on nuclear reactor operations, marked the first instance of Indian-developed software being exported to a foreign country, showcasing India's technological prowess.

Dr. Datta provided a comprehensive overview of the nuclear power scenario in India, detailing the nuclear fuel cycle from mining to power generation. He discussed future aspects of engineering, including composite materials, fractal learning, and automatic cooling, inspiring students to explore the forefront of technological advancements.

His session extended into a captivating exploration of scientific phenomena, connecting theoretical knowledge with practical manifestations. Dr. Datta covered topics such as radioactivity, nuclear fission, various applications of atomic energy, and types of fission reactors, enlightening students about the intricate workings of the nuclear power sector in India.

During the question session, Dr. Datta clarified queries, enkindling intellectual curiosity and fostering a deeper understanding of the subjects discussed. The session was not only motivating but also inspirational, providing a glimpse into the intersection of theoretical knowledge and its practical applications in the scientific realm.

In conclusion, Dr. Debabrata Datta's session served as a beacon of knowledge, bridging the gap between theoretical understanding and practical implementation, and inspiring students to explore the vast and evolving landscape of scientific advancements.

DAY 3:

Date: 21st August 2023

Venue: DM Hall

SESSION 1:

Speaker: Dr. Mrinmoy Chakrabort, Co- Ordinator, AICTE IDEA Lab

Dr. Mrinmoy Chakraborty, a visionary with an unmistakable aura of innovation, took students on an enlightening journey through the intricate realm of AICTE IDEA Lab. This lab, described as a crucible of creativity, serves as a nurturing ground where ideas are transformed into tangible reality.

In his introduction to AICTE IDEA Lab, Dr. Chakraborty showcased cutting-edge technologies, including a laser cutter, 3D printer, CNC router, and a 3D scanner. These tools, he emphasized, are the building blocks of innovation, providing students with hands-on experiences that transcend traditional classroom learning.

Dr. Chakraborty highlighted the dynamic nature of AICTE IDEA Lab, illustrating its role as a hub for creativity. The lab, equipped with state-of-the-art machinery, serves as a playground for ideation and experimentation. Through the showcased technologies, students were given a glimpse into the myriad possibilities that the lab offers for turning concepts into prototypes.

The speaker shed light on the various events organized within AICTE IDEA Lab, emphasizing the lab's role in fostering a culture of innovation and collaboration. These events serve as platforms for students to showcase their ingenuity, engage in interdisciplinary collaborations, and gain exposure to real-world problem-solving.

Dr. Chakraborty's presentation not only unveiled the physical infrastructure of AICTE IDEA Lab but also conveyed the ethos of innovation that permeates the space. The interactive session allowed students to pose questions, fostering a deeper understanding of the lab's potential in cultivating a spirit of entrepreneurship and invention.

In conclusion, Dr. Mrinmoy Chakraborty's presentation on AICTE IDEA Lab left an indelible impression on the audience. The lab stands as a testament to the institution's commitment to providing students with an environment where their creative ideas can flourish into impactful innovations. The session served as an inspiration for students to explore the limitless possibilities within the realm of AICTE IDEA Lab and harness the power of technology for transformative projects.

Speaker: Mr. Anshuman Sett, CEO of NIHT

Mr. Anshuman Sett, a highly successful entrepreneur and the CEO of NIHT, shared invaluable insights during his session, focusing on the digital revolution and the pivotal role of digital marketing in shaping the future of businesses.

Mr. Sett began by emphasizing the significance of the digital era, elucidating how digital marketing is becoming the linchpin for companies of all sizes. He delved into why organizations are increasingly investing in digital marketing and how it has become a cornerstone for brand recognition and growth.

Drawing from his personal journey, Mr. Sett narrated his transition from a traditional advertising agency background to successfully steering his company into the realm of online digital marketing. His motivational story underscored the importance of adapting to the changing landscape and staying ahead of the curve.

A key theme of Mr. Sett's discussion was the need to venture into unexplored territories, encapsulated by his motto of getting into what nobody was talking about. He shared insights on crafting effective digital strategies, including the fundamental concepts of advertisements that influence how people perceive products.

The session also focused on the vital aspect of creating a compelling online brand image. Mr. Sett highlighted the impact this has on consumer perception and explained how companies can use digital platforms to shape their brand narratives effectively.

An intriguing segment of the discussion revolved around the integration of Artificial Intelligence (AI) in advertising. Mr. Sett elaborated on the role of AI in enhancing the advertising process, making it more efficient and personalized for the target audience. Practical examples were provided to illustrate marketing strategies employed by industry giants like Apple and Google. Mr. Sett analyzed how these companies achieved worldwide recognition and cultivated vast, loyal user bases through innovative and impactful digital marketing campaigns.

In conclusion, Mr. Anshuman Sett's session painted a vivid panorama of the ongoing Digital Revolution, showcasing its transformative impact on industries and societies. His insights into the realm of digital marketing served as a guiding light for aspiring

marketers, inspiring them to embrace the dynamic landscape and leverage digital strategies for success.

SESSION 2:

Speaker: Dr. Gour Sundar Mitra Thakur, Professor BCREC

Dr. Gour Sundar Mitra Thakur delivered an insightful speech on Universal Health Values (UHV), emphasizing their crucial role in the day-to-day lives of individuals. He highlighted the importance of education in instilling these values and provided guidelines for values education.

In his discourse, Dr. Thakur stressed the significance of basic human values, which are fundamental to human nature and transcend cultural, religious, and geographical boundaries. These values, including compassion, respect, integrity, justice, tolerance, and responsibility, serve as timeless moral principles applicable universally.

The speaker underscored the role of Universal Human Values in promoting peace, social cohesion, human rights, personal well-being, sustainability, and global cooperation. Despite challenges, education and awareness were identified as powerful tools to promote these values and serve as a moral compass for a harmonious world.

Dr. Thakur highlighted that happiness and prosperity naturally follow when there is enough physical facility, fulfilling the basic requirements for human aspirations. Understanding relationships and the importance of physical well-being are integral aspects of Universal Health Values.

The speech concluded with the assertion that practicing these universal human values leads to personal fulfilment and well-being. Individuals who incorporate these values into their lives often experience greater happiness and satisfaction. Dr. Thakur

emphasized that these values represent the moral compass of humanity, guiding interactions and inspiring individuals to contribute to a world characterized by peace, justice, and equality.
In summary, Dr. Gour Sundar Mitra Thakur's speech provided a comprehensive overview of Universal Health Values, showcasing their timeless significance and the transformative impact they can have on individuals and society at large. Embracing and promoting these values, he concluded, is not only a moral imperative but also a pathway to a brighter and more harmonious future for humanity.

DAY 4:

Date: 22nd August 2023

Venue: DM Hall

SESSION 1:

Speaker: Dr. Arindam Mondal, Registrar, BCREC

Dr. Arindam Mondal, with eloquence, shed light on the inner workings of our college's Registrar Section, offering a behind-the-scenes perspective into the administrative engine driving the institution. His briefing unveiled the essential role played by the registrar in orchestrating academic functions and student records.

Dr. Mondal meticulously detailed the faculty members associated with this pivotal

section, underscoring their key responsibilities. Contact information, including office hours and email addresses, was thoughtfully provided, enabling seamless communication with these faculty members when needed. The presentation was not merely informative but also aimed at fostering a deeper understanding of the administrative processes that propel our institution forward. Dr. Mondal's articulate delivery left the audience with a clearer grasp of the registrar section's significance and how to navigate it effectively for academic inquiries and support.

Speaker: Prof. Subhashish Pal, Exam cell in-charge, BCREC

Prof. Subhashish Pal, as the head of the Exam Cell, played a pivotal role in clarifying the intricacies of examination-related procedures, dispelling apprehensions and fostering a clear understanding among students. His expertise and guidance were instrumental in demystifying the often-complex processes associated with examinations. Prof. Pal's leadership at the helm of the Exam Cell ensured a transparent and comprehensible approach to various examination-related nuances. Through a detailed and informative session, he addressed concerns and uncertainties, creating an atmosphere of confidence among students.

Prof. Subhashish Pal's efforts contributed significantly to a more informed and reassured student body regarding examination procedures. His commitment to clarity and transparency in the examination process reflects positively on the academic environment of our institution. He told us about the website of makautexam.net from where we can access all University exam related information and view the latest notices issued by university regarding exams.

Speaker: Dr. Tapas Mondal, MAR Co-ordinate, BCREC

Dr. Tapas Mondal provided insightful information on Mandatory Additional Requirements (MAR) during a recent session. He emphasized the critical role of accumulating 100 MAR points each year for B.Tech students under AICTE to qualify for their degree. Dr. Mondal presented a comprehensive list of various activities that students can participate in to earn MAR points.

The session highlighted the importance of engaging in diverse activities beyond the academic curriculum to meet the MAR requirements. Dr. Mondal elucidated how different activities contribute varying MAR points, offering students a clear understanding of the potential avenues for participation. His presentation underscored the significance of holistic development and extracurricular involvement in the academic journey. Overall, Dr. Tapas Mondal's guidance provided valuable insights into the MAR system, ensuring that students are well-informed about the requirements for their degree completion.

Speaker: Dr. Tribeni Prasad Banerjee, MOOCs Co-ordinate, BCREC

Dr. Tribeni Prasad Banerjee, in an enlightening discourse, delved into the significance of Massive Open Online Courses (MOOCs) in contemporary education, revealing a transformative world of knowledge accessible at our fingertips. His insightful presentation underscored the growing prominence of MOOCs as a revolutionary educational tool. Dr. Banerjee emphasized how MOOCs democratize education, providing learners with unprecedented access to a diverse range of courses and subjects. Through vivid examples, he illustrated the potential impact of MOOCs in bridging educational gaps and fostering lifelong learning.

The discourse highlighted the flexibility and convenience that MOOCs offer, enabling learners to acquire new skills and knowledge at their own pace. Dr. Banerjee's engaging talk not only demystified the MOOC landscape but also inspired a broader understanding of the opportunities presented by online learning platforms. Overall, the session left the audience with a profound appreciation for the transformative power of MOOCs in shaping the future of education.

SESSION 2:

Speaker: Mr. Sumit Bandopadhyay, Director, Asansol Udan

Mr. Sumit Bandopadhyay led an engaging and enlightening session centered around the "Art of Living. Live and Let Live - Let's Unite the World." Focusing on contemporary societal values, he delved into pertinent themes such as equality and the intrinsic human principles essential for fostering a harmonious society and a peaceful world. Mr. Bandopadhyay skillfully navigated through these concepts, emphasizing their relevance in our modern era.

The session was not only informative but also interactive, as Mr. Bandopadhyay incorporated fun and engaging games that involved student volunteers. Through these activities, he imparted fundamental lessons on navigating life within a society and being an integral part of a larger community. The interactive nature of the session created a dynamic learning environment, allowing participants to absorb key principles in an engaging manner.

Throughout the session, Mr. Bandopadhyay shared valuable life lessons, making the content relatable and applicable to the everyday experiences of the audience. His adept use of interactive methods ensured that the audience remained actively involved, fostering a deeper understanding of the importance of human principles in building a beautiful and cohesive society. Overall, Mr. Sumit Bandopadhyay's session proved to be a valuable and insightful experience, leaving a lasting impact on all participants.

DAY 5:

Date: 23rd August 2023

Venue: DM Hall

SESSION 1:

Speaker: Prof. Shri Krishan Rai, Associate Professor, NIT, Durgapur

Prof. Shri Krishan Rai, a distinguished linguist at NIT, Durgapur, orchestrated a compelling session aimed at inspiring students to overcome their apprehensions about speaking English. The session served as a catalyst for empowering students to fearlessly embrace English as a means of daily communication. Prof. Rai's eloquence

and infectious enthusiasm created a positive atmosphere that was both empowering and cheerful.

Throughout the session, Prof. Rai provided practical insights and strategies to help students conquer their fear of speaking English, underscoring the importance of consistent practice. His charismatic persona was evident in his effective connection with the audience, making his presence influential and inspiring.

The impact of Prof. Rai's guidance on students was profound, leading to newfound motivation to improve English communication skills and build confidence. His dedication to assisting students in overcoming language barriers for effective global communication is commendable and aligns with the ethos of fostering a well-rounded education.

Prof. Rai's role as an invaluable asset to the academic community at NIT, Durgapur, extends beyond his linguistic expertise. His commitment to empowering students reflects in the positive transformation observed among participants, encouraging them to view English not as a challenge but as a tool for personal and professional growth.

In conclusion, Prof. Shri Krishan Rai's inspiring session was a resounding success, leaving an indelible mark on students at NIT, Durgapur. His motivational approach, coupled with his charismatic demeanor, has positioned him as a mentor and guide, contributing significantly to the academic and personal development of the student community.

Additionally, Prof. Rai's insights into the essential components of effective English communication, such as facial expressions, body posture, and attentive listening, further enhanced the students' understanding and skill development in this critical aspect of global communication.

SESSION 2:

Speaker: Dr. Shashi Bajaj Mukherjee, Assistant Professor, BCREC, Durgapur

In the enlightening session titled "Mathematics: Mother Tongue of Engineering" by Dr. Shashi Bajaj Mukherjee, students gained insights into the foundational importance of mathematics. Dr. Mukherjee conveyed that mathematics not only builds mental discipline but also fosters logical reasoning, essential skills for engineering disciplines.

The session underscored the critical role of mathematical knowledge in comprehending various subjects, extending beyond science to encompass diverse areas like music and art. Dr. Mukherjee emphasized how mathematics serves as a unifying language, providing a structured framework for problem-solving and analysis.

The key takeaway was the recognition that mathematics acts as the backbone of engineering, serving as a universal tool that transcends disciplines. Dr. Mukherjee's session effectively highlighted the interdisciplinary significance of mathematics, establishing it as the essential "mother tongue" of engineering and a cornerstone for intellectual development.

Test:

English and Math tests were administered to reassess students' proficiency in these subjects. The purpose of the tests was to evaluate the students' current understanding and command of both English and Mathematics. The re-evaluation aimed to provide insights into individual students' progress and areas that may need additional attention. These tests were conducted to ensure an accurate and up-to-date assessment of students' knowledge in these core subjects. The results will guide educators in tailoring instruction to meet the specific needs of the students.

DAY 6:

Date: 24th August 2023

Venue: DM Hall

SESSION 1:

Speaker: Prof. Krishna Roy, In-Charge Entrepreneurship Development Cell (EDC), BCREC, Durgapur

Prof. Krishna Roy, a proponent of innovation, provided a comprehensive overview of the Entrepreneurship Development Cell (EDC), emphasizing its pivotal role as a haven for fostering entrepreneurial ideas. The session unfolded the contours of the

EDC, elucidating its purpose and objectives in nurturing the spirit of entrepreneurship among students.

Prof. Roy highlighted the importance of cultivating an environment that encourages creativity, risk-taking, and the development of innovative solutions. The EDC was presented as a platform designed to incubate and support entrepreneurial initiatives within the academic community. Prof. Roy's advocacy for innovation and entrepreneurship was evident in the way he portrayed the EDC as a catalyst for transforming ideas into viable business ventures. The session underscored the commitment to instilling an entrepreneurial mindset and fostering a culture of innovation within the academic institution. Prof. Krishna Roy's unveiling of the EDC showcased a strategic initiative poised to shape and support the entrepreneurial endeavours of students.

Speaker: Prof. Sarabjit Lahiri, In-Charge NCC, BCREC, Durgapur

Prof. Sarabjit Lahiri, exuding an aura of discipline, conducted an informative session introducing students to the National Cadet Corps (NCC). The session aimed at instilling character and a profound sense of duty among the participants. Prof. Lahiri's presentation skillfully outlined the objectives and significance of the NCC, emphasizing its role in fostering discipline and leadership qualities. The session provided a comprehensive understanding of the values and principles that NCC instills in its cadets, contributing to holistic personal development. Prof. Lahiri's dedication to familiarizing students with the NCC demonstrated a commitment to shaping well-rounded individuals with a strong sense of responsibility. The session succeeded in inspiring students to consider participation in the NCC as a means of personal and character development. Prof. Sarabjit Lahiri's engagement effectively

conveyed the transformative impact of the NCC in forging character and nurturing a profound sense of duty among students.

Speaker: Prof. Sohini Ghosh, In-Charge NSS Activity, BCREC, Durgapur

Prof. Sohini Ghosh, fuelled by her passion for social service, conducted an enlightening session where she unveiled the opportunities within the National Service Scheme (NSS). The session aimed at inviting students into a realm of selfless service and societal impact. Prof. Ghosh passionately outlined the objectives and scope of the NSS, emphasizing the transformative potential of engaging in community service. Through her presentation, students were introduced to avenues where they could contribute to the betterment of society while developing a sense of empathy and responsibility. Prof. Ghosh's dedication to promoting social service and community engagement was evident in the way she portrayed the NSS as a platform for meaningful and impactful contributions. The session successfully inspired students to consider active participation in the NSS, fostering a spirit of altruism and social responsibility among them. Prof. Sohini Ghosh's engaging presentation effectively conveyed the potential for selfless service and societal impact within the National Service Scheme.

DAY 7:

Date: 25th August 2023

Venue: DM Hall

SESSION 1:

Speaker: Mr. Rohan Chhetri (IT 2010), Alumni Student, BCREC:

The Alumni Student Talk during the induction event proved to be a pivotal moment, fostering a strong connection between current students and accomplished graduates. Mr. Rohan Chhetri, a distinguished alum, shared invaluable insights from their journey since graduating in 2010. They highlighted the significance of skills acquired during their time at BCREC and provided practical advice for the new students. The talk not only inspired the audience with tales of professional success but also emphasized the importance of perseverance and continuous learning. As BCREC celebrates its induction program, the alumni presence served as a beacon for the incoming students, fostering a sense of community and aspiration.

Speaker: Mr. Ranadip Paul (ME08), Alumni Student, BCREC

During the induction event at BCREC, alumnus Ranadip Paul delivered a compelling talk, motivating first-year students for their journey ahead. Sharing his experiences since graduating, Paul emphasized the pivotal role of determination and passion in shaping a successful future. He underscored the unique opportunities offered by BCREC and encouraged students to embrace challenges as learning opportunities. The alumni talk not only inspired the freshmen but also instilled a sense of confidence and purpose as they embark on their academic journey. Paul's insights resonated, fostering a spirit of optimism and ambition among the new college entrants.

SESSION 2:

Speaker: Mr. Suman Chatterjee - ECE 2007, Alumni Student, BCREC

Alumnus Mr. Suman Chatterjee, an ECE graduate, delivered a stirring talk during the BCREC induction, urging first-year students to seize the transformative power of education. Drawing from his personal journey, Chatterjee emphasized the significance of perseverance and curiosity in navigating a successful future in Electronics and Communication Engineering. His insightful words resonated powerfully, fostering a palpable sense of purpose and enthusiasm among the new students. Chatterjee's encouragement to embrace learning opportunities at BCREC left an indelible impact, setting a positive tone for the academic and professional journeys that lie ahead for the incoming students.

Speaker: Mr. Atanu Maity & Prof. Prabal Sahu, TPO, BCREC

During the BCREC induction, Mr. Atanu Maity and Prof. Prabal Sahu, the Training and Placement Officer (TPO) at BCREC, delivered an insightful talk focused on the notable placement achievements over the past several years. They provided compelling data showcasing successful placements in top-tier companies, illustrating the Caliber of BCREC graduates. Emphasizing the importance of skill development and academic excellence, they highlighted the specific requirements these companies seek in potential candidates. The talk served as a valuable guide for incoming students, shedding light on the industry's expectations and preparing them for future placement endeavours. Mr. Maity and Prof. Sahu's expertise and data-driven

approach instilled confidence among the new students, assuring them of the promising placement opportunities that lie ahead in their academic journey at BCREC.

Blood Donation Camp

On 20th September 2023, the Induction team arranged a Blood Donation Camp for the 1st year students in the college medical unit. Dr. Sanjay S. Pawar, Principal, BCREC, inaugurated the event with an aura of excitement, weaving a symphony of enlightening the events.

Engaging in blood donation is a noble pursuit, particularly for students who represent the vibrancy and compassion of the younger generation. It transcends the confines of

the classroom, offering students a tangible way to make a positive impact on society. By actively participating in blood donation drives, students contribute to a lifeline for individuals in need, embodying the principles of altruism and empathy. This noble act not only saves lives but also fosters a sense of collective responsibility within the student community. Students become instrumental in building a culture of compassion, where the act of giving becomes a shared value. Beyond the immediate health benefits, involvement in blood donation initiatives provides students with valuable educational experiences, deepening their understanding of healthcare needs and the importance of community support. Through their involvement, students not only establish a connection with the recipients but also lay the foundation for a lifelong commitment to humanitarian causes, showcasing that even small individual efforts can collectively bring about significant positive change in the world.

Social Awareness on “Save Life Save Drive”

"Save Life, Save Drive" is a resonant call to action that has sparked social awareness among students regarding responsible driving practices. This initiative recognizes the pivotal role that students play in shaping the future of road safety.

On 26th September 2023, the Induction team arranged a Social Awareness Program on the “Save Life Save Drive” for the 1st year students in the Fuljhore area.

Through this awareness program and student-led campaigns, the movement educates young drivers about the impact of their choices on the road. Students are encouraged to prioritize safety by avoiding distractions, adhering to speed limits, and embracing a culture of responsible driving. The campaign not only highlights the potential consequences of reckless behaviour but also emphasizes the collective responsibility we all share in creating safer roads. By engaging in peer-to-peer discussions, workshops, and community outreach, students actively contribute to building a culture where road safety is not just a legal obligation but a shared commitment to protecting lives. The "Save Life, Save Drive" initiative empowers students to become advocates for change, ensuring that every journey becomes an opportunity to safeguard lives and promote a sense of social responsibility among their peers. In the hands of students, this campaign becomes a powerful tool for shaping a future where road safety is paramount and where the ethos of responsible driving is ingrained in the consciousness of the next generation.

Tree Plantation

Tree plantation, when undertaken by students, becomes a powerful expression of environmental stewardship and responsibility. Students, as the torchbearers of the future, recognize the pivotal role that trees play in sustaining life on Earth. Engaging

in tree plantation drives allows students to actively contribute to their local ecosystems. The act goes beyond the mere physical act of planting saplings; it instills a sense of environmental consciousness and ownership.

The induction team organized a tree plantation event on 26th September 2023. This event marked the commencement of a significant environmental initiative aimed at fostering a green and sustainable campus. The ceremony began with an inspiring address by our esteemed principal, Dr. Sanjay S. Pawar, who highlighted the importance of environmental conservation and the pivotal role trees play in maintaining ecological balance. The principal emphasized the need for collective responsibility in creating a healthier and more sustainable environment for our college community. The principal planted the first sapling, setting an example for students, faculty, and staff to actively participate in this noble cause. The chosen saplings were diverse, representing the local flora and ensuring a harmonious integration with our surroundings. The event was attended by enthusiastic students, dedicated faculty members, and supportive staff who actively engaged in the tree plantation process. The planting sites were strategically selected across the college grounds to maximize visual impact and provide optimal environmental benefits.

This inauguration ceremony not only marked the beginning of our college's commitment to a greener future but also served as an educational opportunity for students. They gained valuable insights into the importance of trees, ecological systems, and the significance of individual contributions to environmental conservation. As we witness the growth of these newly planted trees, let us be reminded of our collective responsibility to nurture and protect our environment. This tree plantation initiative is a small yet significant step toward creating a sustainable and eco-friendly campus.

Poster Presentation

The poster presentation event featured a diverse range of topics, allowing students to explore their interests and contribute to the academic and creative atmosphere of our college. The event was organized by the Induction team and was held on 26th September 2023. The ceremony began with the presence of our esteemed principal, Dr. Sanjay S. Pawar, Dr. Saikat Maitra (Advisory BCREC), and distinguished guests added a touch of prestige, as they extended their appreciation and acknowledgment to the assembled and encouraged students.

Students from 1st year actively participated in the event, creating posters that reflected their understanding of academic subjects, social issues, and artistic expression. The posters were displayed in designated areas around the college, allowing the entire community to appreciate the students' work. Each poster was a testament to the students' dedication and creativity. The content ranged from scientific research findings to social awareness campaigns, showcasing the student's ability to combine knowledge and creativity to communicate effectively.

The event also provided an opportunity for students to develop essential skills such as research, critical thinking, and public presentation. Judges, consisting of faculty members and invited guests, evaluated the posters based on content, visual appeal, and the student's ability to articulate their ideas. The event not only celebrated the intellectual and creative achievements of our students but also encouraged a culture of academic excellence and artistic expression within our college. Beyond academic achievement, the poster presentation event underscored the importance of nurturing a culture where students feel empowered to share their insights and express their creativity. This event was a celebration of the dynamic intellectual environment at our college, showcasing the brilliance and potential of our student body.

Football Match

Football matches foster a sense of college pride and unity among students, creating a positive college spirit. Students come together during matches, building social connections and friendships beyond the stadium. The excitement of a football match provides a healthy outlet for students to release stress, offering a break from academic pressures. Witnessing skilled athletes in action can inspire students to engage in physical activities, promoting a healthier lifestyle.

On 26th September 2023, the Induction team arranged a Football match for the 1st year boys on college football playgrounds. The presence of Dr. Sanjay S. Pawar, Principal, BCREC, Dr. Saikat Maitra (Advisory BCREC), and distinguished guests added a touch of prestige, as they extended their appreciation and acknowledgment to the assembled and encouraged students.

Football matches strengthen the sense of community within colleges, bringing students, teachers, and parents together. Involvement in organizing college football events can provide leadership opportunities for students. Anticipation for football matches often leads to increased college attendance, promoting regular academic engagement. Students learn valuable lessons about teamwork, cooperation, and goal-setting through the dynamics of football. Experiencing the highs and lows of a match teaches students emotional resilience, an essential life skill. Successful football events contribute to an overall boost in college morale, positively impacting the learning environment. Students actively engage with the sport, participating in discussions and cheering for their college teams both online and offline. Exceptional players may serve as role models, inspiring students to pursue careers in sports or related fields. Involvement in football, whether as players or spectators, can contribute to the development of various skills, including focus, discipline, and strategic thinking. Football matches often inspire creative expressions through art, music, or writing, allowing students to channel their passion. Balancing academic commitments with football-related activities teaches students valuable time management skills. College football matches promote inclusivity, providing students from diverse backgrounds with a common ground for celebration. Football events often encourage parental involvement, as families come together to support their students and the college community. Colleges can use football matches as educational tools, incorporating lessons about sportsmanship, teamwork, and the history of the sport. The memories created during college football matches often become cherished moments that students carry with them throughout their lives.

Promoting College Resources and Services

The induction program showcased a remarkable harmony as it intricately connected with diverse departments within the college. This seamless orchestration effectively integrated various elements, including the AICTE IDEA Lab, UHV facilities, MOOCS, Exam Cell, and Registrar Section. These components emerged as concrete foundations, collectively playing a pivotal role in broadening students' awareness of the diverse resources available to them.

The AICTE IDEA Lab offered an avenue for innovation and creativity, promoting an environment of exploration and experimentation. The UHV facilities, with their state-of-the-art infrastructure, contributed to a conducive learning atmosphere. The

integration of MOOCS emphasized the importance of online education, providing students with accessible and diverse learning opportunities.

The Exam Cell and Registrar Section played critical roles in ensuring the smooth administrative functioning of academic processes. Their inclusion in the induction program underlined the significance of understanding the administrative aspects of the college journey.

In summary, the orchestration of the induction program not only highlighted the interconnectedness of various departments but also emphasized their collective role in enriching students' understanding and utilization of the extensive resources available within the college.

Feedback and Evaluation

The participant feedback for the induction program resonated as a unified voice, affirming its substantial success. Notably, the program significantly elevated participants' confidence levels, enhanced their communication skills, and effectively highlighted available resources. The continuous feedback loop, encompassing both praise and constructive criticism, serves as the foundation for ongoing improvements in the program.

In summary, the induction program emerged as highly successful, equipping students with the necessary support and information for a seamless transition to college life. The program contributed to fostering a sense of belonging and community among students.

However, there are opportunities for enhancement. Some participants noted that lectures occasionally felt overly extended, suggesting a need for more efficient time management. Additionally, increasing interactivity in workshops could further engage participants. Further improvements may involve offering more insights into the college's student support services and a broader overview of extracurricular offerings to enhance the overall student experience.

Conclusions:

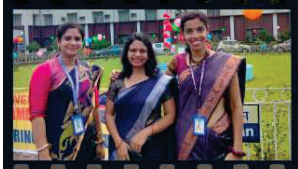
The success of Dr. BC Roy Engineering College's Induction Program is rooted in a well-calibrated equilibrium, skilfully combining academic theory, hands-on learning, and enthusiastic engagement. This program has established itself as a shining example of effective student integration, skill development, and holistic empowerment.

The fusion of industry insights, wholehearted participation, and a seamless blend of informative and creative components vividly demonstrates the fundamental principles that underpin the program's triumph. The program has effectively bridged the gap between theoretical knowledge and practical application, ensuring that

students are well-prepared for the challenges of their academic journey and future careers.

This holistic approach is exemplified through partnerships, diverse activities, and enlightening discussions that foster a sense of belonging and camaraderie among participants. The program not only lays a solid foundation for academic excellence but also cultivates an environment where students feel empowered, connected, and motivated to excel in their academic and personal endeavours.

In summary, Dr. BC Roy Engineering College's Induction Program stands as a model for effective student onboarding and empowerment, demonstrating the college's commitment to providing a well-rounded educational experience for its students.





DR. B. C. ROY ENGINEERING COLLEGE, DURGAPUR

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Certificate for Completion of Python 3.4.3 Training

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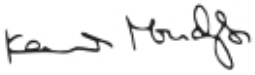
AMIT KOTAL at **Dr. B. C. Roy Engineering College, Durgapur** invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

Credits: 4 **Score:** 65.00%

May 6th 2024



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IIT Bombay

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3380466P0U

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3391915RUL

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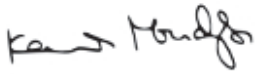
Credits: 4 **Score:** 40.00%

May 6th 2024



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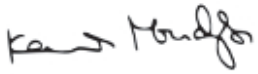
Credits: 4 **Score:** 54.00%

May 6th 2024



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34297335NG

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Certificate for Completion of Python 3.4.3 Training

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Credits: 4 **Score:** 65.00%

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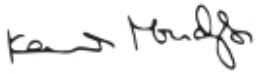

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34297349WZ

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Certificate for Completion of QCad Training

This is to certify that **ARKA BANERJEE** has successfully completed **QCad** test organized at **Dr. B. C. Roy Engineering College, Durgapur** by **SAYANTAN DUTTA** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

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Credits: 1 **Score:** 60.00%

May 6th 2024

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37824320DV

Spoken Tutorial Project at IIT Bombay

Certificate for Completion of QCad Training

This is to certify that **SAKET KUMAR** has successfully completed **QCad** test organized at **Dr. B. C. Roy Engineering College, Durgapur** by **SAYANTAN DUTTA** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

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Credits: 1 **Score:** 48.00%

May 6th 2024

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IIT Bombay

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3782433IAW

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Certificate for Completion of QCad Training

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Credits: 1 **Score:** 40.00%

May 6th 2024

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3782434RI2

Spoken Tutorial Project at IIT Bombay

Certificate for Completion of QCad Training

This is to certify that **UMAR AFROZ** has successfully completed **QCad** test organized at **Dr. B. C. Roy Engineering College, Durgapur** by **SAYANTAN DUTTA** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

AMIT KOTAL at **Dr. B. C. Roy Engineering College, Durgapur** invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

Credits: 1 **Score:** 48.00%

May 6th 2024

Prof. Kannan M Moudgalya
IIT Bombay

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37824365BU

Spoken Tutorial Project at IIT Bombay

Certificate for Completion of QCad Training

This is to certify that **PARTHA PRATIM BARUI** has successfully completed **QCad** test organized at **Dr. B. C. Roy Engineering College, Durgapur** by **SAYANTAN DUTTA** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

AMIT KOTAL at **Dr. B. C. Roy Engineering College, Durgapur** invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

Credits: 1 **Score:** 44.00%

May 6th 2024

Prof. Kannan M Moudgalya
IIT Bombay

Credits for the Spoken Tutorial courses are based on our estimates of the work required to complete them. Recipient institutions are required to apply due diligence and get them ratified/modified by their own duly formed academic/assessment body. Spoken Tutorial is a project at IIT Bombay, started with funding from the National Mission on Education through ICT, Ministry of Education (previously MHRD), Govt. of India.

3782439EWU

Spoken Tutorial Project at IIT Bombay

Certificate for Completion of QCad Training

This is to certify that **KAIF ALI KHAN** has successfully completed **QCad** test organized at **Dr. B. C. Roy Engineering College, Durgapur** by **SAYANTAN DUTTA** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

AMIT KOTAL at **Dr. B. C. Roy Engineering College, Durgapur** invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

Credits: 1 **Score:** 64.00%

May 6th 2024

Prof. Kannan M Moudgalya
IIT Bombay

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3782441JO8

Spoken Tutorial Project at IIT Bombay

Certificate for Completion of QGIS Training

This is to certify that **SNEHA KARMAKAR** has successfully completed **QGIS** test organized at **Dr. B. C. Roy Engineering College, Durgapur** by **SAYANTAN DUTTA** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

AMIT KOTAL at **Dr. B. C. Roy Engineering College, Durgapur** invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

Credits: 2 **Score:** 65.00%

May 6th 2024

Prof. Kannan M Moudgalya
IIT Bombay

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336825022Z

Spoken Tutorial Project at IIT Bombay

Certificate for Completion of QGIS Training

This is to certify that **NEHA BHATTACHARJEE** has successfully completed **QGIS** test organized at **Dr. B. C. Roy Engineering College, Durgapur** by **SAYANTAN DUTTA** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

AMIT KOTAL at **Dr. B. C. Roy Engineering College, Durgapur** invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

Credits: 2 **Score:** 77.50%

May 6th 2024

Prof. Kannan M Moudgalya
IIT Bombay

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3368251P2F

Spoken Tutorial Project at IIT Bombay

Certificate for Completion of QGIS Training

This is to certify that **ANKITA KUNDU** has successfully completed **QGIS** test organized at **Dr. B. C. Roy Engineering College, Durgapur** by **SAYANTAN DUTTA** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

AMIT KOTAL at **Dr. B. C. Roy Engineering College, Durgapur** invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

Credits: 2 **Score:** 95.00%

May 6th 2024

Prof. Kannan M Moudgalya
IIT Bombay

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3368254MIQ

Spoken Tutorial Project at IIT Bombay

Certificate for Completion of QGIS Training

This is to certify that **ADITYA SHEKHAR** has successfully completed **QGIS** test organized at **Dr. B. C. Roy Engineering College, Durgapur** by **SAYANTAN DUTTA** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

AMIT KOTAL at **Dr. B. C. Roy Engineering College, Durgapur** invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

Credits: 2 **Score:** 77.50%

May 6th 2024

Prof. Kannan M Moudgalya
IIT Bombay

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3368256DYR

Spoken Tutorial Project at IIT Bombay

Certificate for Completion of QGIS Training

This is to certify that **ANINDYA CHATTERJEE** has successfully completed **QGIS** test organized at **Dr. B. C. Roy Engineering College, Durgapur** by **SAYANTAN DUTTA** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

AMIT KOTAL at **Dr. B. C. Roy Engineering College, Durgapur** invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

Credits: 2 **Score:** 95.00%

May 6th 2024

Prof. Kannan M Moudgalya
IIT Bombay

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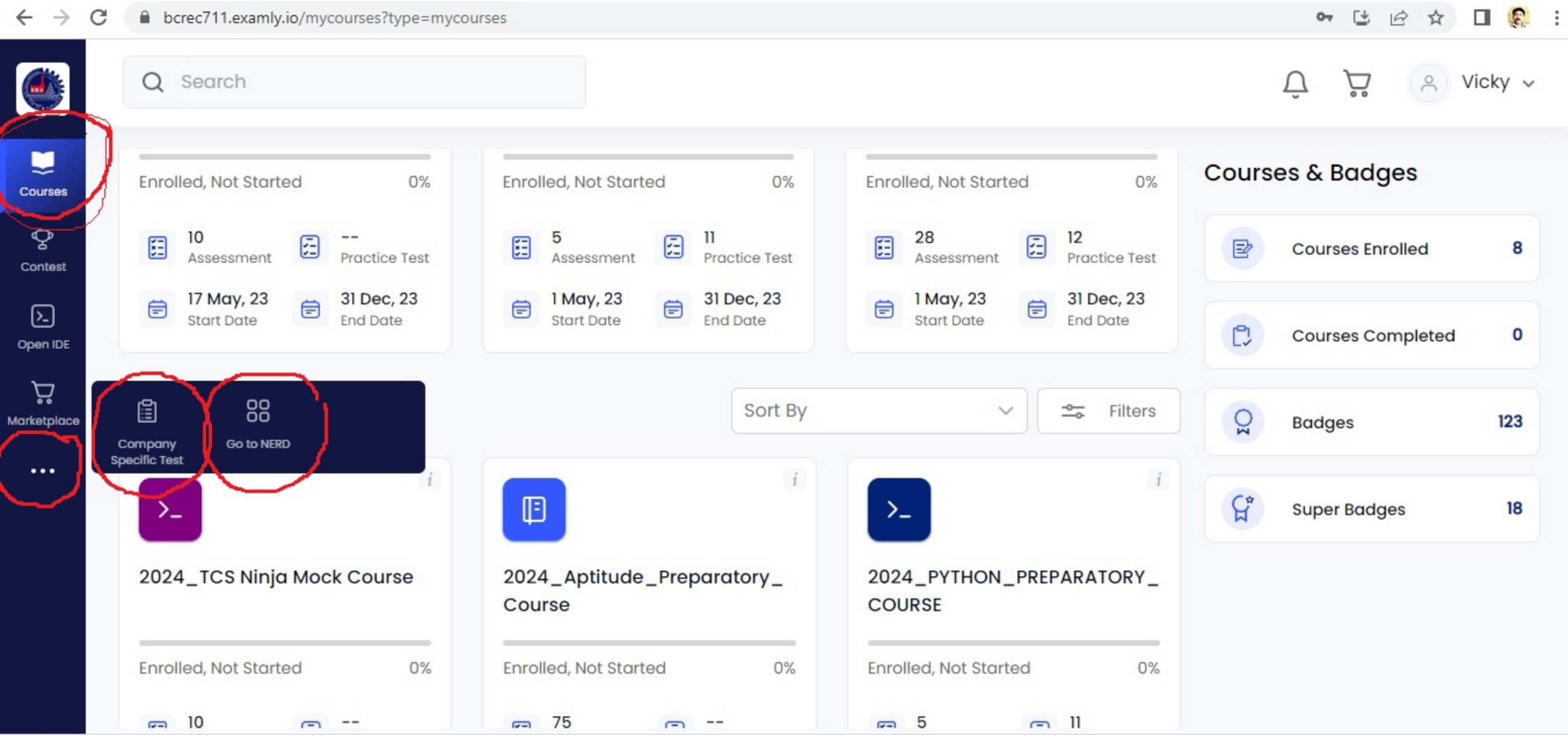
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Search
Vicky
Courses
Contest
Open IDE
Marketplace
Company Specific Test
Go to NERD
Enrolled, Not Started 0%
10 Assessment
-- Practice Test
17 May, 23 Start Date
31 Dec, 23 End Date
Enrolled, Not Started 0%
5 Assessment
11 Practice Test
1 May, 23 Start Date
31 Dec, 23 End Date
Enrolled, Not Started 0%
28 Assessment
12 Practice Test
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Sort By
Filters
Courses & Badges
Courses Enrolled 8
Courses Completed 0
Badges 123
Super Badges 18
2024_TCS Ninja Mock Course
Enrolled, Not Started 0%
10
--
2024_Aptitude_Preparatory_Course
Enrolled, Not Started 0%
75
--
2024_PYTHON_PREPARATORY_COURSE
Enrolled, Not Started 0%
5
11

Diagnostic Career Test - 2024

Dr. B.C. Roy Engineering College, Durgapur

Region - West Bengal

Test executed on 28th September, 2023

For Further Inquiries Contact :

Avirup Das (Sales Owner)
9830727800

Vikash Singh (Account Manager)
9831085247

in at least 1 DCT

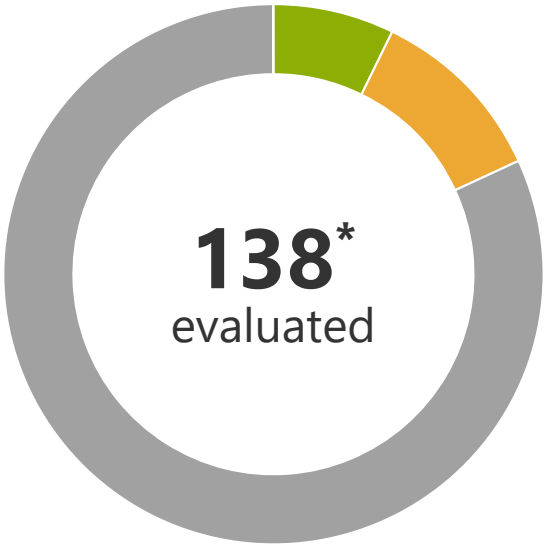
7 did not participate

Branches Participated

- Computer Science Engineering, B. Tech.
- Information Technology, B. Tech.
- MCA
- Electronics and Communications Engine...
- Electrical Engineering, B. Tech.

DCT Conducted

- Analytical Reasoning Test
- Quantitative Aptitude Test
- English Usage Test
- Employability Aptitude Test
- Coding Test
- WET
- Domain Test



10
Candidates
Industry Ready

15
Candidates
Need Practice

113
Candidates
Need Training

*Note: 8 candidates did not take required tests.

RESULTS OVERVIEW

Test	Participation	Score Comparison (%)			Industry Readiness (Based on Test)		
		Region Average	Your Institute Average	Your Institute Topper	Industry Ready	Need Practice	Need Training
Analytical Reasoning Test	93%	55	47	80	64	18	60
Quantitative Aptitude Test	95%	39	50	86	89	31	26
English Usage Test	94%	61	60	86	120	16	8
Employability Aptitude Test	91%	44	56	78	65	27	47
Coding Test	92%	24	62	100	34	41	65
WET	92%	52	47	92	27	22	91
Domain Test	92%				81	10	49

INDUSTRY READINESS

Benchmarks for the three categories are defined based on employability criteria used by employers while hiring through assessments of similar complexity and constructs. While 'Industry Ready' refers to students who are likely to be shortlisted by most employers on the respective skill, 'Need Practice' students may still be shortlisted by a few organizations but not all of them. Those in 'Need Training' category need considerable improvement to be shortlisted by any of the employers.

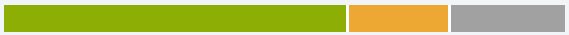
Branch Performance

Computer Science Engineering, B. Tech. (53)	8 (15%)	6 (11%)	39 (74%)
Information Technology, B. Tech. (19)	1 (5%)	0 (0%)	18 (95%)
MCA (17)	0 (0%)	0 (0%)	17 (100%)
Electronics and Communications Engi... (28)	1 (4%)	9 (32%)	18 (64%)
Electrical Engineering, B. Tech. (21)	0 (0%)	0 (0%)	21 (100%)

ANALYTICAL REASONING TEST

Analytical Reasoning Test (ART) assesses a candidate's ability to think logically and solve problems. This skill is the most important component of a person's learnability and is required by almost every employer. This test is a combination of topics that assess different types of reasoning such as inductive, deductive and visual reasoning along with attention to detail concepts.

Sectional Performance

	Industry Ready	Need Practice	Need Training	
Series and Coding - Decoding	98 (70%)	20 (14%)	22 (16%)	
Flowcharts and Visual Reasoning	86 (61%)	25 (18%)	30 (21%)	
Odd One Out and Analogies	46 (33%)	54 (39%)	40 (29%)	
Logical Reasoning	31 (22%)	50 (36%)	59 (42%)	
Critical Reasoning	25 (18%)	50 (36%)	65 (46%)	

QUANTITATIVE APTITUDE TEST

Quantitative Aptitude Test (QAT) evaluates a candidate's understanding of basic mathematical concepts, ability to work with numbers and reason numerically to model and solve problems. This skill is critical and demanded by most employers across all white collar roles for interpreting, analyzing and acting on numerical data to solve problems ranging from basic to complex.

Sectional Performance

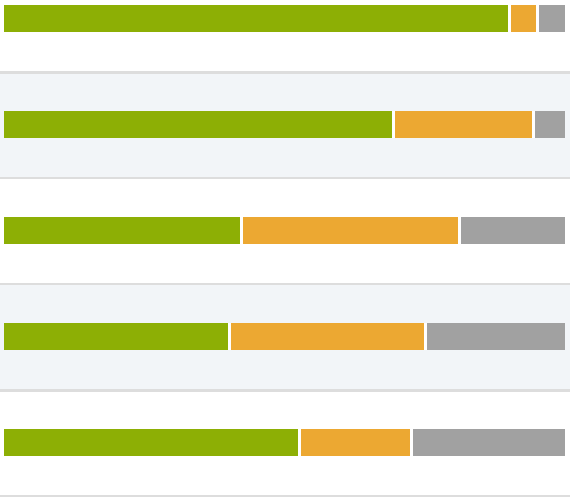
Profit, Loss and Interest	109 (76%)	22 (15%)	12 (8%)
Speed, Distance, Time and Work	107 (74%)	19 (13%)	18 (12%)
Ratio, Percentage and Progressions	84 (59%)	37 (26%)	22 (15%)
Number System, Algebra and Equations	98 (69%)	21 (15%)	23 (16%)
Statistics	62 (44%)	40 (28%)	40 (28%)
Data Interpretation	55 (40%)	29 (21%)	53 (39%)
Geometry, Mensuration and Trigonometry	52 (36%)	25 (17%)	66 (46%)

ENGLISH USAGE TEST

English Usage Test (EUT) comprehensively assesses a candidate's ability to read, understand and interpret relevant English text in meaning and form, in a time bound manner. It evaluates a candidate on areas such as Grammar, Vocabulary, Reading Comprehension, Sentence correction. In a globalized workplace with multiple stakeholders spanning across continents, English is today an indispensable skill.

Sectional Performance

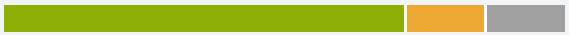
	Industry Ready	Need Practice	Need Training
Articles, Prepositions and Voice	130 (90%)	7 (5%)	7 (5%)
Sentence Correction and Speech	99 (69%)	36 (25%)	9 (6%)
Reading Comprehension	60 (42%)	56 (39%)	28 (19%)
Synonyms, Antonyms and Spellings	58 (40%)	50 (35%)	36 (25%)
Phrases, Idioms and Sequencing	75 (52%)	29 (20%)	39 (27%)



EMPLOYABILITY APTITUDE TEST

Employability Aptitude Test (EAT) is a full length test that combines the core areas of Cognitive Ability - Analytical Ability, Quantitative Ability and English Usage - that are assessed by most employers today at the time of selection. A strong performance in each of these skills indicates high learnability, trainability and increases the probability of success in various job roles.

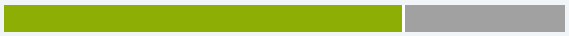
Sectional Performance

	Industry Ready	Need Practice	Need Training	
Numerical Ability	99 (73%)	20 (15%)	17 (12%)	
English Usage	99 (71%)	20 (14%)	20 (14%)	
Analytical Reasoning	87 (64%)	14 (10%)	35 (26%)	

COMPUTER SCIENCE DOMAIN TEST

This test is important for candidates aspiring for jobs in software products or services industries. This test focuses particularly on topics that almost all companies regard as critical for most CS/IT specific job roles. Proficiency in these areas, in addition to beating the benchmark on key cognitive abilities, will give a candidate a definite edge in hiring process of multiple major IT companies.

Sectional Performance

	Industry Ready	Need Practice	Need Training	
Operating System Concepts	78 (88%)	0 (0%)	11 (12%)	
DBMS Concepts	63 (71%)	0 (0%)	26 (29%)	
Networking Concepts	54 (61%)	0 (0%)	35 (39%)	
Computer Architecture	51 (58%)	0 (0%)	37 (42%)	
Design and Analysis of Algorithm	52 (58%)	0 (0%)	37 (42%)	
Data Structures	42 (47%)	0 (0%)	47 (53%)	
C, C++ and OOPs	36 (41%)	0 (0%)	52 (59%)	

ELECTRONICS DOMAIN TEST

This test is important for candidates who want to build their careers in the Semiconductor, Electronic Design Automation, Telecommunications/Networking or similar industries either in public or private sector. In the modern day world flooded with electronic devices, Electronics and Communication is a vast and rapidly growing space with high demand of expertise with a wide knowledge base.

Sectional Performance

Industry Ready | Need Practice | Need Training

Electronic Devices and EMMI	26 (87%)	0 (0%)	4 (13%)
Microprocessors and Microcontrollers	24 (80%)	0 (0%)	6 (20%)
Communication System	23 (77%)	0 (0%)	7 (23%)
Digital Electronics	23 (77%)	0 (0%)	7 (23%)
Network Analysis and Synthesis	22 (73%)	0 (0%)	8 (27%)
Electronic Circuits	16 (53%)	0 (0%)	14 (47%)
Control System	12 (40%)	0 (0%)	18 (60%)

ELECTRICAL DOMAIN TEST

This test is essential for candidates who want to grow as engineers in the Power/Energy, Instrumentation, Automation including Manufacturing industries. With the sectors of power generation and distribution in high flux in India and abroad and also the rapid improvement/upgradation of automation and control systems, skilled electrical engineers can look forward to a world of opportunities.

Sectional Performance

	Industry Ready	Need Practice	Need Training
Microprocessors and Microcontrollers	17 (85%)	0 (0%)	3 (15%)
Electrical Machines	14 (67%)	3 (14%)	4 (19%)
Network Analysis and Synthesis	16 (80%)	0 (0%)	4 (20%)
EMMI	13 (65%)	0 (0%)	7 (35%)
Digital Electronics	13 (62%)	0 (0%)	8 (38%)
Power Electronics	11 (58%)	0 (0%)	8 (42%)
Control System	9 (45%)	0 (0%)	11 (55%)

About the Report

This report is designed to provide insights on overall student performance and their training needs across key employability skills that are critical for building successful careers. CoCubes' 10+ years of experience working with over 600 employers has helped build insights into skill needs of organizations and benchmarks they use for entry level as well as lateral recruitment across all major industries in India. Institutes can use these insights to develop training plans, better nurture and engage talent to help students learn effectively and take a positive step towards their long term careers.

About Us

We are India's leading assessment and hiring platform and run assessments to measure employability across all domains - from Programming to Plumbing. We work with 600+ corporate clients to execute entry level as well as lateral assessments and impact over a million candidates each year running assessments in over 350 cities alongside being a part of the Skill India initiative as well.

Thus, every day we strive to create value for our institutional clients by helping them measure and improve employability and helping candidates move ahead on their career path. Our vision is to ensure that everyone in the country gets an equal opportunity to build a career.

CoCubes is an integral part of Aon plc (NYSE: AON)

Diagnostic Career Test (DCT) Syllabus & Pattern

30+

standard and custom domain assessments

10+ years

expertise of designing assessments for entry to mid-level job roles

1 million+

assessments administered annually

750+

corporate clients

Test Structure and Syllabus (Engineering)

Module Type	Duration	Sections	# of items	Topics
Cognitive	60 mins	English Usage Test (EUT)	50	Reading Comprehension; Grammar including Articles, Prepositions, Voice, Sentence Correction, Speech, Tenses; Verbal Ability including Synonyms, Antonym, Spellings, Idioms, Phrase and Sequencing
		Quantitative Ability Test (QAT)	50	Concepts of Mathematics including Time & Work, Speed & Distance, Algebra, Equations, Progressions, Profit Loss and Interest, Ratio, Averages, Geometry, Mensuration, Statistics and Data Interpretation
		Analytical Reasoning Test (ART)	50	Visual Reasoning, Statement & Conclusions, Relationships, Logical Reasoning, Attention to Details and Flowcharts
		Employability Aptitude Test (ART)	60	English Usage, Analytical Reasoning, Numerical Ability
Coding	45 mins		2	Writing codes to solve a set of problems in language of choice: C, C++, C#, Java, Python
Written English Test (WET)	25 mins		1	Candidate has to write his/her views on simple topics of general awareness. English Grammar, Sentence Construction and Vocabulary are assessed along with relevance to topic and adherence to word limit. Example of a topic - Should schools have uniforms
Domain	30 mins	Civil	30	Building Material, Construction Scheduling, RCC Design, Design of Steel Structure, Environmental Engineering, Soil Mechanics and Foundation, Structural Analysis, Water Resource engineering and Hydrology
		Electrical	30	Electrical Machines, EMMI, Power Electronics and Instrumentation, Network Analysis and Synthesis, Control Systems, Digital Electronics Microcontroller and Microprocessor
		Mechanical	30	Thermodynamics, Design of Machine Members, IC Engines and Compressors, Theory of Machine, Engineering Material and Metrology, Strength of Materials, Fluid Mechanics, Manufacturing Process
		Electronics	30	Electronic Devices & EMMI, Network Analysis and Synthesis, Microprocessor & Micro controllers, Digital Electronics, Communication Engineering, Control System
		Computer Science	30	C, C++, OOPS Concepts, Data Structures, DBMS concepts, Operating System Concepts, Design and Analysis of Algorithms, Networking Concepts, Computer Architecture
		Chemical	30	Chemical Thermodynamics and Reaction engineering, Fluid Dynamics, Heat and Mass Transfer, Industrial Chemistry, Polymers, Process Dynamics, Control and Measurements, Reaction Kinetics

Test Structure and Syllabus (MBA)

Module Type	Duration	Sections	# of items	Topics
MBA 1st Year	40 mins	English Usage Test (EUT)	30	English Grammar - Basics, English Grammar- Advanced, Reading Comprehension, Vocabulary, Verbal Ability
		Quantitative Ability Test (QAT)	30	Arithmetic – Basic, Arithmetic –Advanced, Data Interpretation – Basic, Data Interpretation – Advanced, Statistics
		Analytical Reasoning Test(ART)	30	Process Flow/Orientation, Attention to details, Logical Reasoning – Basic, Logical Reasoning –Advanced, Critical Reasoning
	25 mins	Written English Test (WET)	20	Candidate has to write his/her views on simple topics of general awareness. English Grammar, Sentence Construction and Vocabulary are assessed along with relevance to topic and adherence to word limit. Example of a topic - Should schools have uniforms
	15 mins	Excel + Powerpoint	15	Excel Formula and Function, Shortcuts, Videos in PowerPoint, Customisation, Presentation
MBA 2nd Year	30 mins	Employability Aptitude Test (EAT)	30	English Usage, Analytical Reasoning, Numerical Ability
	25 mins	Written English Test (WET)	1	Candidate has to write his/her views on simple topics of general awareness. English Grammar, Sentence Construction and Vocabulary are assessed along with relevance to topic and adherence to word limit. Example of a topic - Should schools have uniforms
	20 mins	Management Fundamentals	20	Basic of HR, Basics of Finance, Basics of S&M, Basics of Operation

Contact

To learn more about Aon's Assessment Solutions, visit us at:
assessment.aon.com

About Aon

Aon plc is the leading global provider of risk management, insurance and reinsurance brokerage, and human resources solutions and outsourcing services.

Our key advantage is our broad view of two of the most important issues in our economy today: risk and people. With an employee base of 50,000 people working in more than 120 countries, we can anticipate how changes in one sector impact another.

Another advantage is our client focus: Every day our employees ask, "How can we help a client or how can we help a colleague help a client?" Because each of our client groups has unique needs, our professionals—coordinated by strategic account managers, or relationship managers—specialize by product, function and client industry. By truly listening to you and working with you as a partner, we can best develop solutions that work seamlessly with your business. Only in this manner can we help you uncover risks and discover new opportunities to make your business more successful, now and into the future.

Visit aon.com for more information.

About Assessment Solutions

Aon's Assessment Solutions includes the cut-e and CoCubes brands and operates as part of Aon's global offering in talent solutions, helping clients achieve sustainable growth by driving business performance through people performance. Aon's Assessment Solutions group undertakes 30 million assessments each year in 90 countries and 40 languages.

Empower Results®

Activity name: Developing Online Repository of Business Plan/Prototypes Developed and Way forward plan

Overall report of the activity

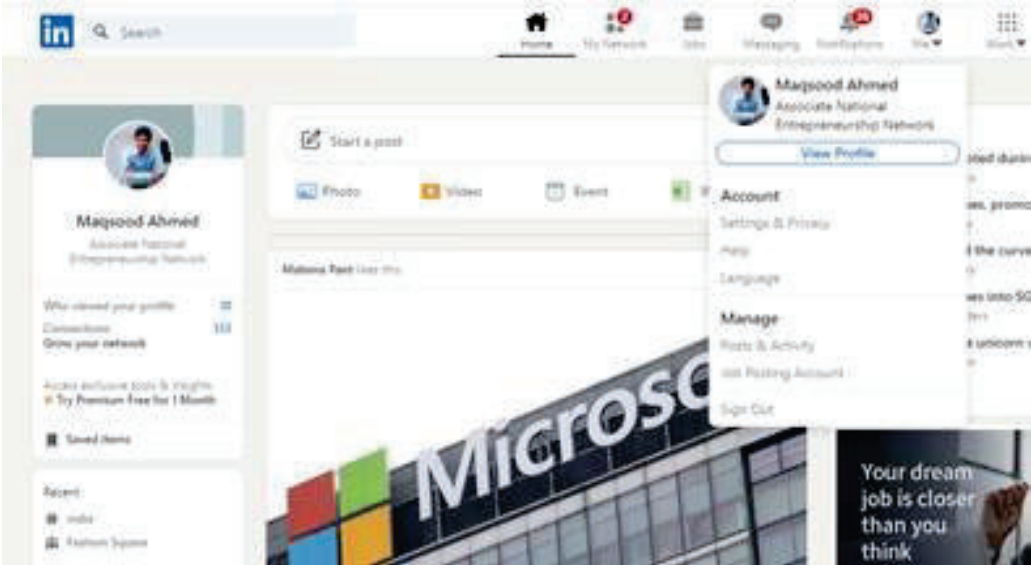
Title of the event:
Product Design for Medium and Small Scale Rural Industries.

Objective of the event:
Engage students and young faculty members in building effective business models and presentations to persuade angel investors in their endeavors. Professionalism and a positive corporate image can both be demonstrated through a well-crafted presentation. A company's ability to attract the right employees, clients, and investors can be made or broken by how well it presents itself to potential audiences.

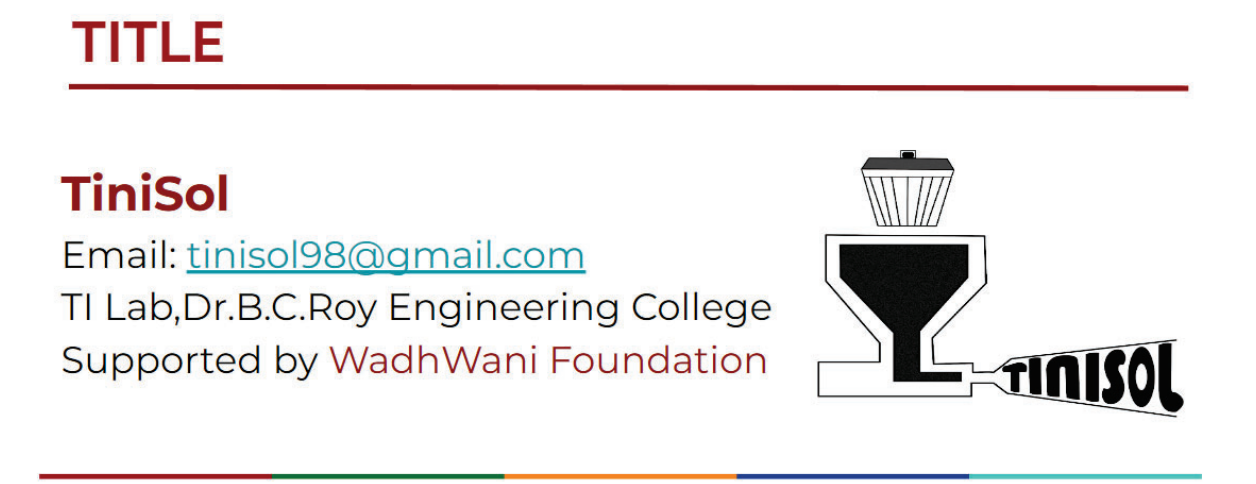
Presenters:
There were a total of 30 student participants, and their business concepts were presented by 10 groups. The semi-finals will consist of three competitors. TINISOL was the group that made it to the final round. They offered a desktop injection molding machine that was inexpensive and geared toward rural business owners, with a particular focus on SEZ areas.

Participants' details:

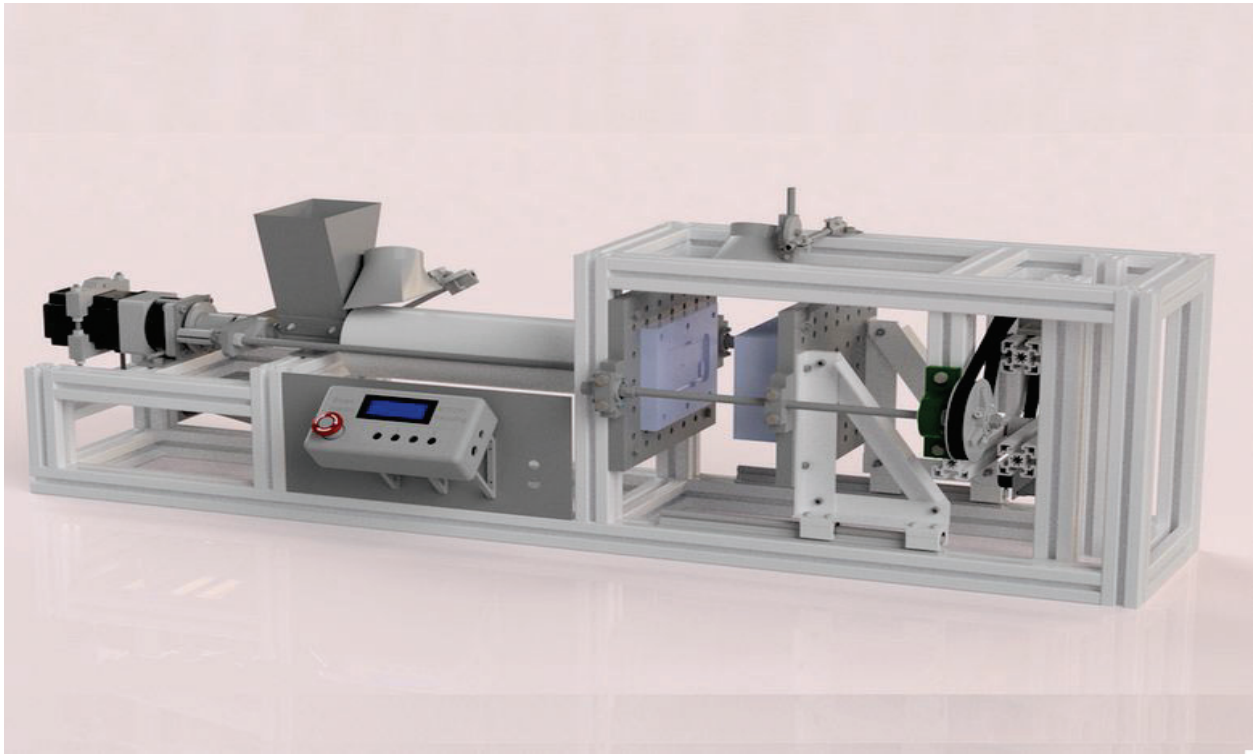
1. Students : 30
2. Faculty Participants : 4
3. Faculty Mentors : 3
4. Venture Capitalist/ Jury : 2
5. External Evaluators : 2
6. Collaborator : Wadhwani Foundation (NEN)



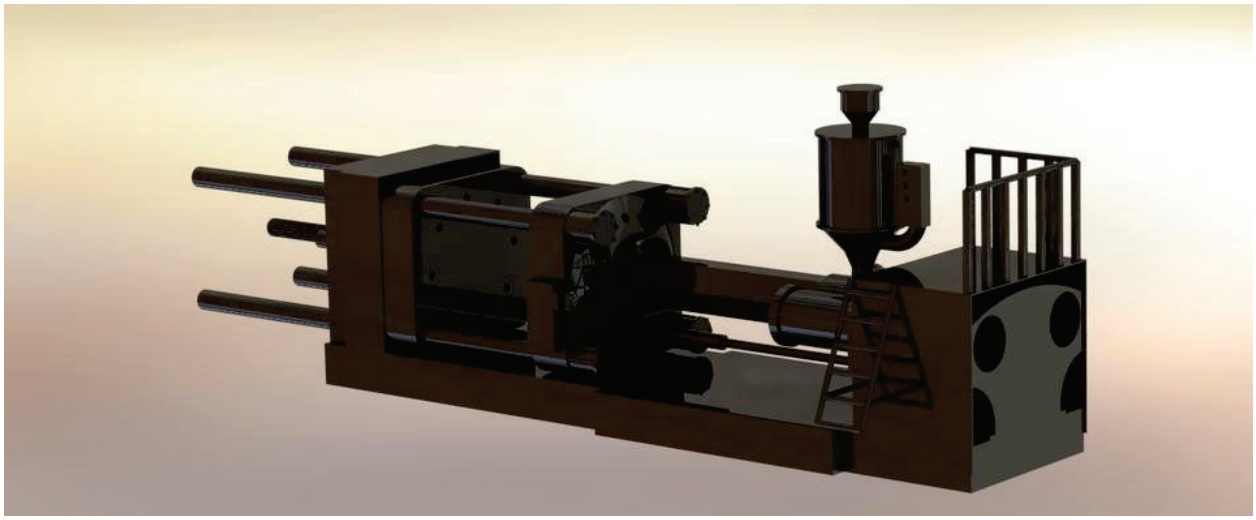
Posters/ banners:



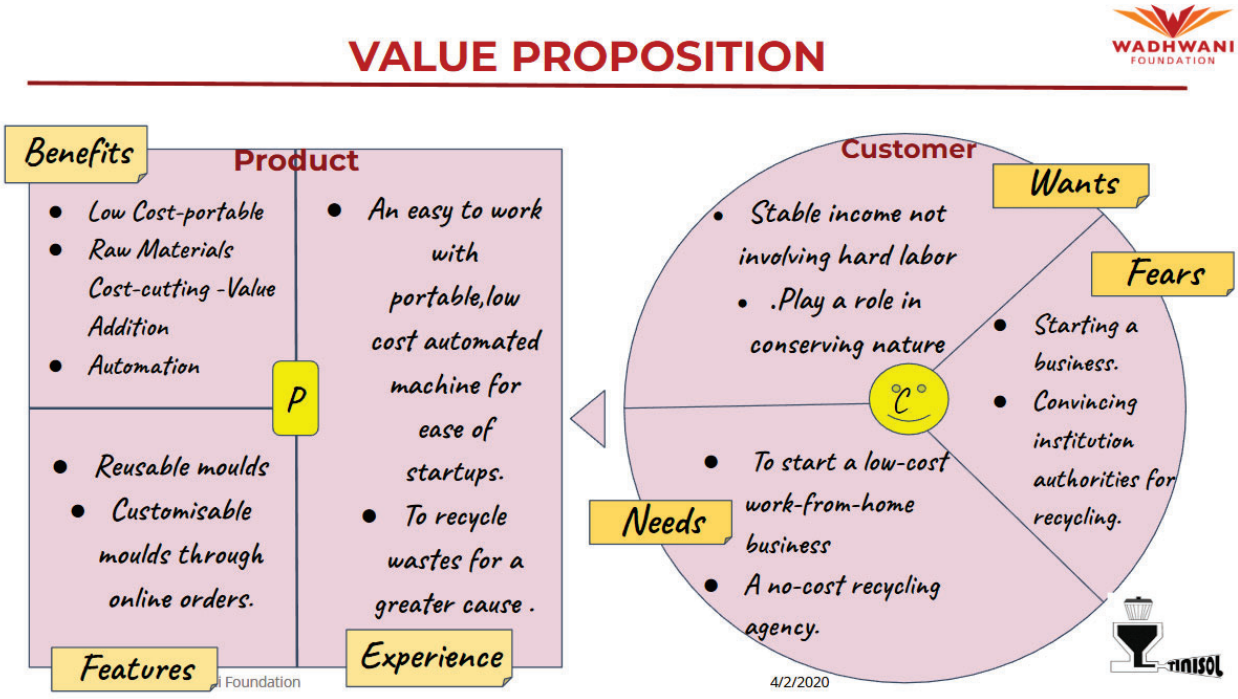
Photographs:



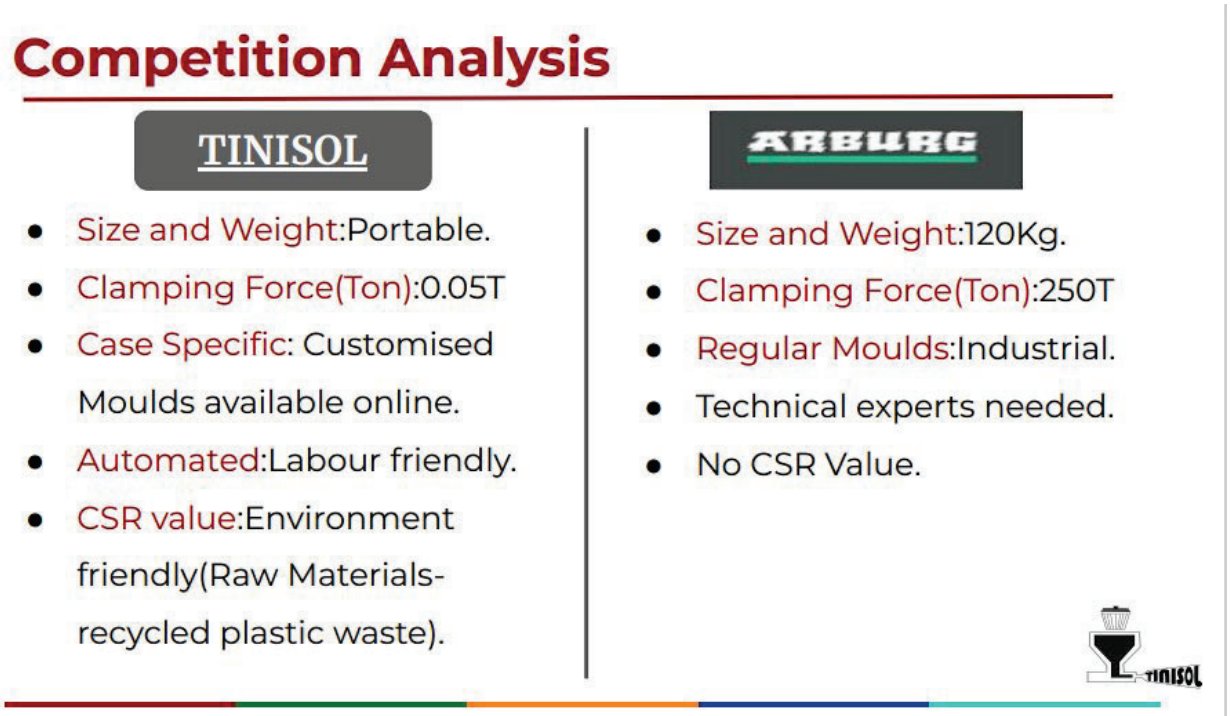
1. CAD Drawing of Model



2. Revision 1 render



3. Value Proposition



4. Competition Analysis

Key outcome of the activity:

For both internal and external audiences, presentations were used by students to educate, motivate, and persuade. Presentations were incorporated into their sales, training, and internal communication plans, and they made use of the attention-getting and retention-inspiring capabilities of both words and images.

Professionalism and an organization's brand are both bolstered by well-crafted presentations. A company's ability to attract the right employees, clients, and investors can be made or broken by how well it presents itself to potential audiences.

CERTIFICATE

OF ACHIEVEMENT

This is to certify that Tini Sol, a practice venture created as part of Wadhwani Foundation - NEN's programs on entrepreneurship, has been certified by a Global Jury as a **Real Venture** based upon prescribed criteria, with very high prospects to become a real business.

Congratulations to Barun Satpati, , CMO of this venture from Dr. B.C Roy Engineering College,India.

WADHWANI FOUNDATION

Certificate Validation Website : https://cert.wfglobal.org/verify
Certificate Validation Code : gRBA4taNHI

Sunita Singh
EVP Wadhwani Foundation,
Co-Founder, NEN

Youtube link of training/ activity:

Social media link:

Feedback from the participants:

Overall feedback as acquired through offline feedback forms show satisfactory to enthusiastic responses. Out of a total feedback of 300, the event acquired 276, which quantifies to 92% of positive response.

PRIMARY POSITIVE COMMENT : Well Organized. Motivational. Inspires entrepreneurial interest. PRIMARY NEGATIVE COMMENT : Hostel/Boarding facility not available to all.

Summary of the event and other details:

Students used presentations to educate, encourage, and persuade audiences both within their own school as well as audiences outside of their school. Presentations were incorporated into their strategies for sales, training, and internal communication, and they made use of the attention-getting and memory-inspiring powers of both words and images. Internal communication was also a focus of their efforts.

Presentations that are well produced lend credibility to an organisation while also enhancing its professional image. How successfully a company presents itself to potential customers, clients, and investors may make or break its ability to recruit the proper people to work for the company, do business with the company, and invest in the firm.

30 Student participants in 10 groups projected their business ideas. 3 were selected for the semi finals. The finalist was the group called TINISOL. They presented a low cost desktop injection molding machine for rural entrepreneurs , with specific emphasis on SEZ regions.

Prototype to be developed for the Innovative PoC submitted in the second quarter and upload the details as per the guidelines.

NAME : TINISOL

TEAM MEMBERS:

1. Pinakshmi Ghosh - 12000317074
2. Barun Satpati - 12000317105
3. Auroshree Sinha Roy - 12000317108
4. Rituparno Mukherjee - 12000317062
5. Biplab Naskar - 12000317103

BROAD TECHNICAL CATEGORY: LOW COST INJECTION MOLDING MACHINE

TARGET CONSUMER : MSME/RURAL ENTREPRENEURS

SUMMARY/TECHNICAL OBJECTIVES:

The problem that we identified as worth solving is that there are increasing volumes of wastes from e-Labs (especially the ones that use 3-D printers) and there are still unemployed women in the rural and urban areas who need an opportunity though they are quite eager to devote themselves.

Certificate of Participation

This is to certify that **Sweety paul** Roll No. **2303031** of **Dr. B.C. Roy Engineering College Durgapur** has participated in the event **Poster** competition on the "Engineers' Day Program", held on **15 September 2023,** organized by **Dr. B.C. Roy Engineering College Students' Chapter (Civil Engineering) and The Institution of Engineers (India) Durgapur Local Centre.**

Prof. Bappaditya Das,
Institutional Coordinator, IEI Students' Chapter, BCREC

Prof. (Dr.) Sanjay S Pawar
Principal,
BCREC

Certificate of Participation

This is to certify that **Archismita Das** Roll No. **2303060** of **Dr. B.C. Roy Engineering College Durgapur** has participated in the event **Model** competition on the "Engineers' Day Program", held on **15 September 2023,** organized by **Dr. B.C. Roy Engineering College Students' Chapter (Civil Engineering) and The Institution of Engineers (India) Durgapur Local Centre.**

Prof. Bappaditya Das,
Institutional Coordinator, IEI Students' Chapter, BCREC

Prof. (Dr.) Sanjay S Pawar
Principal,
BCREC

Certificate of Participation

This is to certify that **Aditya kumar** Roll No. **12001322048** of **Dr. B.C. Roy Engineering College Durgapur** has participated in the event **Poster** competition on the "Engineers' Day Program", held on **15 September 2023,** organized by **Dr. B.C. Roy Engineering College Students' Chapter (Civil Engineering) and The Institution of Engineers (India) Durgapur Local Centre.**

Prof. Bappaditya Das,
Institutional Coordinator, IEI Students' Chapter, BCREC

Prof. (Dr.) Sanjay S Pawar
Principal,
BCREC

Certificate of Participation

This is to certify that **Md Ezazullah** Roll No. **2303048** of **Dr. B.C. Roy Engineering College Durgapur** has participated in the event **Poster** competition on the "Engineers' Day Program", held on **15 September 2023,** organized by **Dr. B.C. Roy Engineering College Students' Chapter (Civil Engineering) and The Institution of Engineers (India) Durgapur Local Centre.**

Prof. Bappaditya Das,
Institutional Coordinator, IEI Students' Chapter, BCREC

Prof. (Dr.) Sanjay S Pawar
Principal,
BCREC

1 Use of Construction and Demolition Waste Material for Soil Stabilization

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Keywords
Bearing capacity, construction waste, demolition waste, soil stabilization, sustainable development

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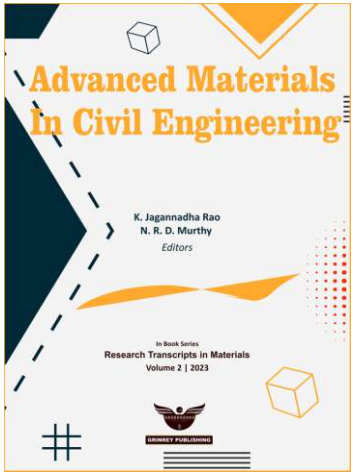

https://doi.org/10.55084/grinrey/RTM/978-81-964105-5-1_1

Abstract

Soil stabilization is the method of modifying and improving soil engineering properties. Properly stabilized soil exhibit better bearing capability, shear strength, density and lower permeability, plasticity and shrink-swell characteristics. Soft and expansive soil is grave threat to the existence and safety of the structures constructed over and underneath it. The availability of a suitable stabilizer, which can modify and strengthen the characteristics of weak soil, is vital for the safety and longevity of the structures. It is essential to use such

a stabilizer which is cheap, easily available and environment-friendly. Construction and demolition (C&D) debris are solid wastes accessible at construction sites at nominal cost. This study mainly investigates the changes in the soil behaviour, precisely the strength characteristics, on mixing the C&D wastes by replacing the original soil with 5%, 10%, 15% and 20% of the C&D debris respectively. The results demonstrated that up to certain extent the strength characteristics improved. The C&D debris utilization can help in environmental protection and prevention of land and water pollution, which can contribute towards the goal of sustainable development.

1. Introduction

Soil is a combination of minerals, dead and living organisms, air and water. Due to significant interaction of these four components, soil is rendered as an essential natural resource. Soil stabilization is the process of boosting the characteristics of the soil in order to improve its strength, stability, bearing capacity etc. by the amalgamation of some suitable additives in the original soil. If a weak soil stratum is discovered during construction, the normal practice is to replace it with other good quality soil with a desirable bearing capacity. By soil stabilization, the characteristics of local accessible soil may be boosted, and the enriched soil can be used successfully as subgrade material without replacing the local soil. The expense of replenishing weak soil is more than the cost of the subgrade or foundation improvement with proper stabilizer. Proper soil stabilization techniques can effectively increase the strength characteristics of the soil to the required level. In this study an effort has been made to use the debris, available at local construction sites, as soil stabilizers to ameliorate the soil properties and stabilize the locally available soil for the construction of buildings and other concrete and RCC structures over it without the fear of structural failure due to settlement of the foundation soil.

1.1 Various materials used for improvement of soil engineering properties

Diamond and Kinter, (1965) have assessed the mechanism of soil-lime stabilization meticulously. They have found that there was a key reaction between the lime and soil which helped in binding the soil particles

through the synthesis of strong water insoluble gel [1]. The ASTM Standards on Soil Stabilization (1992) has recommended changing the grain size physically which includes the particle size distribution of soil. The mixing of additives and soil particles could hold the soil grains in a tough bond, therefore producing enriched soil compared to mechanical and physical methods [2]. Hardjito and Rangan (2005) conducted detailed research on the synthesis and use of locally available fly ash (ASTM Class F) based geopolymer concrete. They used the same technique and equipment, used to make ordinary Portland cement (OPC) concrete, to make geopolymer concrete. They found that the density, elasticity modulus, Poisson's ratio, stress-strain and indirect tensile strength of the geopolymer concrete were equivalent to OPC concrete [3]. Olaniyan et al., (2011) observed that the soil improvement by physical and mechanical means could be achieved by dwindling the void ratio by compaction and by using fibrous and geomaterials as non-biodegradable reinforcements [4]. Manso et al., (2013) observed noteworthy enhancement in mechanical properties and compressive strength, when clays were assorted with ladle furnace slag. The compressive strength for clay was superior since it kept growing as from day three onwards. For the smectite group, the compressive strength increased at 28 days but the outcome was analogous with clay and lime mix except at 90 days where the results improved [5]. Anand Kumar et al., (2014) strived for construction of roads in places having poor soil quality using demolished brick waste (DBW) as soil stabilizer. They resolved that 40% is the ideal DBW content which has to be added to cohesive soil for proper stabilization. The maximum dry density (MDD) value improved for the soil stabilized using DBW content. They found that MDD of 1.954 gm/cc was obtained when 40% DBW content was mixed with the virgin soil sample. They also found that the CBR value was highest when 40% DBW was mixed with soil and the Unconfined compressive strength value showed around 100% increment when the virgin soil sample was mixed with DBW at ratio of 60:40 [6]. Kerni et al., (2015) critically reviewed the role of various methods and techniques in soil stabilization. They concluded that different wastes like wood ash, fly ash, rice husk ash etc. were being utilized as soil stabilizers but the C&D waste was not being utilized for soil stabilization. They also

suggested that there was a need for utilization of C&D wastes of buildings for soil stabilization. The C&D wastes could help in reduction of hazardous environmental impacts of the waste [7]. Jain and Chawda, (2016) worked on the stabilization of clayey soil by utilizing damaged concrete debris. They observed the MDD and the CBR value improved and the OMC reduced with the surge in damaged concrete percentage in the mixture. They concluded that the demolished concrete could act similar to lime and cement in enhancing the characteristics of clayey soil. It was also observed that there was a reduction in the cost of construction and hazardous environmental impacts [8]. Kumar and Rathod, (2018) reviewed several literatures and finally suggested the usage of C&D debris to curb detrimental effect of wastes on environment and enhance soil properties. They also suggested the use of polypropene as an economical material with high strength, longevity and non-biodegradability which in turn could improve soil properties leading to soil stabilization [9]. Bhat and Gupta, (2018) examined and analyzed the various sorts of researches on the use of C&D waste in pavement subgrade. They suggested that use of C&D waste for improving sub-grade properties. They observed that coarser aggregates were used but finer were escaped which could be utilized for enhancing density of the soil [10]. Silva et al., (2019), Ding et al., (2020) involved aggregates from debris in construction application and highway subgrade filling respectively [11-12]. Bagriacik, (2021) mixed alkali-activated demolition waste with sandy soil and observed enhancement of soil properties including bearing capacity [13]. Islam et al., (2022) amalgamated recycled mortar powder with clayey soil in different proportions and found improvised consolidation settlement of soil [14]. Xue et al., (2023) mixed recycled sand obtained from debris for modifying strength of pavement subgrades and observed positive results [15].

Several research works have been done using demolished waste fines and waste fibrous materials separately for improving the soil quality. The C&D debris can improve the soil characteristics and enhance the vital soil engineering properties like bearing capacity, compressive strength and shear strength. According to Centre for Science and Environment, India

produces millions of tonnes of C&D debris annually but has a recycling capacity of only about 1.3 percent of the debris generated daily and remaining 98.7 percent of the debris remains unused creating a pile of solid waste which poses a serious hindrance in the process of solid waste management. So it is vital to use the C&D debris properly for enhancement of soil properties and utilization of solid waste.

2. Methodology and Experimentation

Soil is the most essential part of the foundations and pavement structures which provides base and support to the structures and pavement from the bottom. The various properties of the soil are very important for the longevity and durability of the structures built over it. In the current study the soil sample was taken from a location close to Dr. B. C. Roy Engineering College. The soil sample was extracted at depth of 1.5 metre form the ground level. About 40 kg of the soil sample was collected in a gunny bag, the soil sample was thoroughly pulverized in a large tray to break lumps and put into oven at 110°C for entire day to expel all the moisture present in the soil. After placing out of the oven, the soil sample was air dried and then the sample was thoroughly analyzed for the index properties and various strength parameters in the departmental soil lab. The various index properties of soil like grain size distribution using various IS Sieves (4.75 mm to 0.075 mm), Liquid Limit (W_L), Plastic Limit(W_P), Plasticity Index (PI), moisture content (w), Specific Gravity (G), Maximum Dry Density (MDD), Optimum Moisture Content (OMC) and the strength parameters tests like Direct Shear Test (DST), Unconfined Compressive Strength (UCS) test, California Bearing Ratio (CBR) test (Both in soaked, unsoaked conditions) have been thoroughly tested in the soil lab. Then about 30 kg of C&D waste was obtained from a nearby construction site in a plastic bag. The C&D waste debris was also thoroughly pulverized in a large tray using a wide rammer, sieved through 4.75 mm and 0.150 mm sieves (4.75 mm passing and retained on 0.150 mm) and oven dried at 110°C for full day. Then the original soil sample was replaced by 5%, 10%, 15% and 20% of debris and the change in strength of mixed soil was thoroughly tested using DST, UCS and CBR (Soaked and Unsoaked) tests. The various strength test results for the

mixed soil was compared with the virgin soil sample to find out what sort of change takes place in the strength characteristics of the soil sample after having mixed the C&D wastes.

3. Results and Discussion

The various index and the strength characteristics of the original soil were examined and the results have been recorded in Table 1:

Table 1. Various index and strength properties of the original soil sample

Soil Properties		Results
Coefficient of Uniformity		5.5
Coefficient of Curvature		1.01
IS Classification soil type		Well Graded Soil
Specific Gravity (G)		2.36
Moisture Content (w)		14.715%
W_L		29%
W_P		12.82%
PI		16.18%
Compaction Test	OMC	19%
	MDD, (kg/cm^3)	1.79
DST for original soil	Angle of Friction (Φ)	24°
	Cohesion (C) in kg/cm^2	0.284
UCS Test for original soil	Unconfined Compressive strength, qu Shear strength, S = qu/2	0.834 kg/cm^2 0.417 kg/cm^2
Unsoaked CBR value for original soil	At 2.5 mm	5.5
	At 5.0 mm	7.5
Soaked CBR value for original soil	At 2.5 mm	6.0
	At 5.0 mm	7.5

3.1 Direct Shear Test (DST) results for various percentage of C&D debris in the soil sample

Table 2 clearly depicts the value of shear stress at various percentages of C&D debris mixed with original soil.

Table 2. Comparison of Shear Stress for various % of C&D debris mixed with original soil

Normal Stress	Shear Stress (original soil)	Shear Stress (5% of C&D waste mixed)	Shear Stress(10% of C&D waste mixed)	Shear Stress(15% of C&D waste mixed)	Shear Stress(20% of C&D waste mixed)
0.5	0.045	0.060	0.192	0.156	0.151
1.0	0.065	0.085	0.267	0.247	0.222
1.5	0.080	0.116	0.389	0.338	0.303

Table 3 shows cohesion values for various percentages of C&D debris mixed with original soil.

Table 3. Value of Cohesion, C (kg/cm^2) for various % of C&D debris mixed with original soil

Percentage C&D mixed with original soil	Cohesion, C (kg/cm^2)
0%	0.284
5%	0.310
10%	0.590
15%	0.847
20%	0.185

Figure 1 depicts cohesion values at various percentages of C&D debris mixed with original soil.

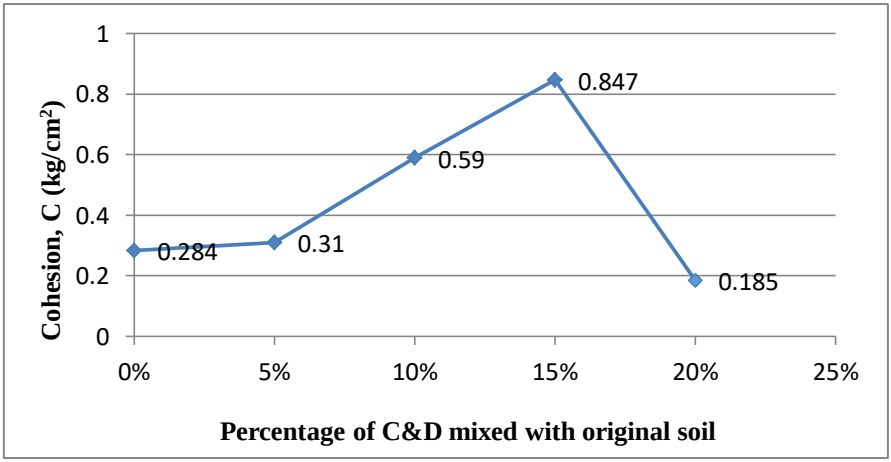

Fig. 1. Value of cohesion (C) for various % of C&D debris mixed with original soil

Table 4 shows angle of friction (Φ°) for various percentages of C&D debris mixed with original soil.

Table 4. Value of angle of friction for various % of C&D debris mixed with original soil

Percentage C&D debris mixed with original soil	Value of Angle of friction (Φ°)
0%	24°
5%	32°
10%	28°
15%	23°
20%	21°

Figure 2 depicts angle of friction at various percentages of C&D debris mixed with original soil.

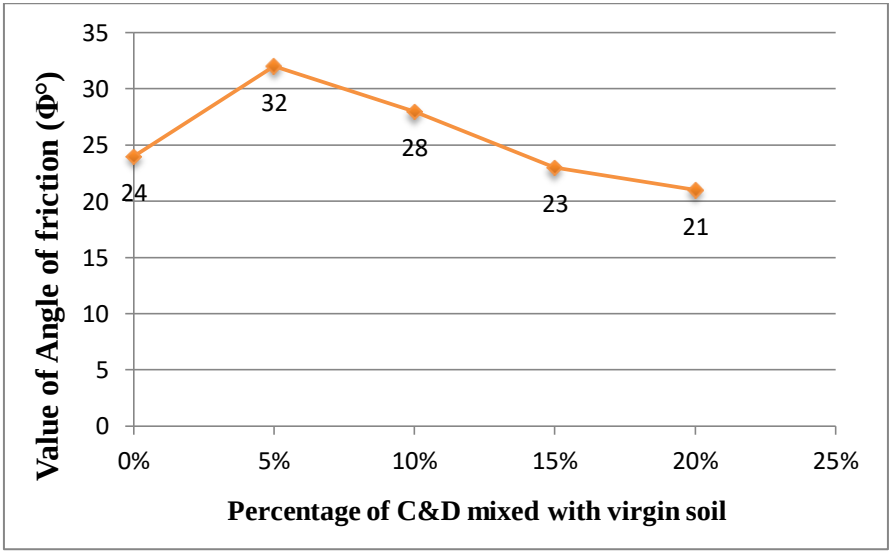

Fig. 2. Value of angle of friction (Φ°) at various % of C&D debris mixed with original soil

3.2. UCS Test results for various percentage of C&D debris mixed with original soil

Table 5 shows average compressive strength for various percentages of C&D debris mixed with original soil

Table 5. Average Compressive Strength (kg/cm^2) for various % of C&D debris mixed with original soil

Percentage C&D debris mixed with original soil	Average Compressive Strength (kg/cm^2)
0%	0.834
5%	0.769
10%	0.688
15%	0.671
20%	0.664

Figure 3 depicts average compressive strength at various percentages of C&D debris mixed with original soil.

3.3. Results obtained for the Soaked and Unsoaked samples during CBR Test for various % of C&D debris mixed with the soil sample

Table 6 shows CBR value for soaked samples at 2.5 mm & 5.0 mm penetration for various percentages of C&D debris mixed with original soil.

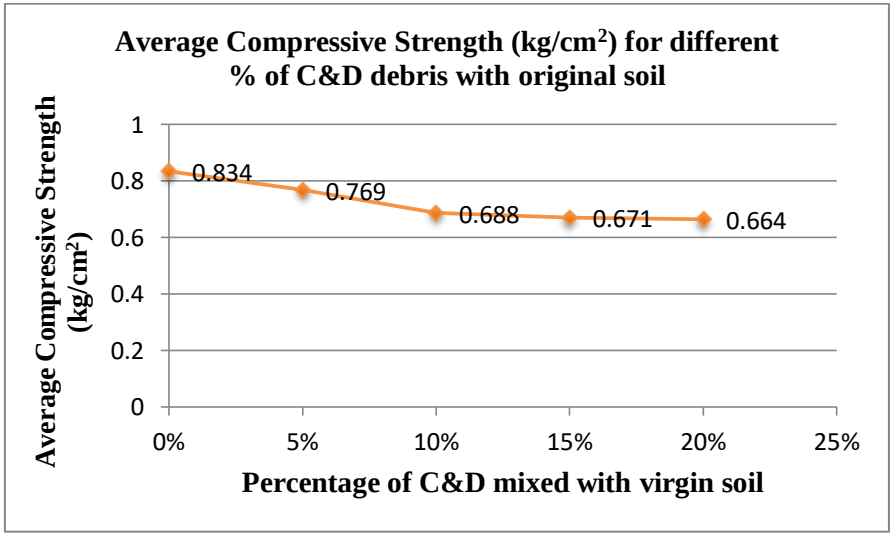

Fig. 3. Value of average compressive strength at various percentages of C&D debris mixed with original soil

Table 6. CBR value for soaked samples at 2.5 mm & 5.0 mm penetration for various % of C&D debris mixed with the soil

CBR Penetration	100 % Soil	95% Soil+ 5% C&D debris	90% Soil+ 10% C&D debris	85% Soil+ 15% C&D debris	80% Soil+ 20% C&D debris
CBR Penetration at 2.5 mm	6	4	6	7	4
CBR Penetration at 5.0 mm	7.5	5.5	7	8	5.5

Table 7 shows CBR value for unsoaked samples at 2.5 mm & 5.0 mm penetration for various percentages of C&D debris mixed with original soil.

Table 7. CBR value for unsoaked samples at 2.5 mm & 5.0 mm for various % of C&D debris mixed with the soil

CBR Penetration	100 % Soil	95% Soil + 5% C&D debris	90% Soil + 10% C&D debris	85% Soil + 15% C&D debris	80% Soil + 20% C&D debris
CBR Penetration at 2.5 mm	5.5	7.5	6	5.5	5
CBR Penetration at 5.0 mm	7.5	10	8	7.5	7

During the initial index properties tests on the original soil sample it was found that the soil was well graded soil with good proportion of particles of different sizes. The Uniformity Coefficient was observed as 5.5 and the Coefficient of Curvature was observed as 1.01. The water content (w) of the original soil sample was 14.715%, W_L was about 29%, W_P was about 12.82%, the PI was about 16.18%, and G was about 2.36.

The MDD value was 1.79 kg/cm^3 at an OMC of 19%. So beyond this there will not be any increment in the soil strength with further addition of water.

After completing the UCS test and gradually substituting the soil by 5%, 10%, 15% and 20% respectively of the C&D debris, it was seen that the compressive strength of the mixed soil samples deteriorated with further escalation of C&D debris. As a result, it can be said that the compressive strength of soil decreases as more C&D debris are mixed with soil sample.

The DST was performed initially with the virgin soil and then the C&D debris was mixed in increasing order by replacing the virgin soil with 5%, 10%, 15% and 20% respectively. The value of shear stress of original soil at different values of the normal stress was found to be 0.045, 0.065, and 0.080 respectively. After replacing the original soil sample with 5%, 10%, 15% and 20% of the C&D debris, it was found that value of shear strength increased till 10% of replacement of soil with the waste but the strength started dropping gradually after that point. The value of cohesion (C, in kg/cm^2) was found to be highest (0.847 kg/cm^2) at 15% replacement of the soil sample but the value dropped beyond that point. The value of the angle of friction ($\Phi°$) was found highest (32°) at 5% replacement of the soil with C&D debris but the value decreased with further addition.

The CBR test was initially done with the original soil at both soaked and unsoaked conditions. Then the soil was replaced consecutively by 5%, 10%, 15% and 20% of C&D debris and the test was repeated under soaked and unsoaked conditions. It was realized that under soaked conditions the CBR at 2.5 mm penetration initially decreased for the 5% replacement of soil with the waste but the CBR value then increased for 10% and 15% replacement of soil with the waste but the value then dropped finally at 20% replacement of soil with the C&D debris. It was also observed that in soaked condition the CBR value at 5 mm decreased for the 5% and 10% replacement but the value then increased at 15% of replacement of soil with the waste and ultimately declined again at 20% of replacement of soil with the C&D debris.

4. Conclusion

So overall from the present study it can be concluded that the soil stabilization using C&D debris, in terms of shear strength, compressive strength and subgrade strength, was satisfactory and some of the results obtained for a few tests were very encouraging. For example the results of DST, CBR test were good enough to encourage usage of C&D debris for the stabilization of soil. The C&D debris is a significant contributor to landfill waste. By repurposing these materials for soil stabilization, they are diverted from landfills, helping to reduce the strain on limited landfill capacity and minimizing the associated environmental hazards. The C&D debris usage will be an effective tool for solid waste management, as it leads to proper use of the debris and also help in maintaining cleanliness and cater towards the goal of sustainable development for the betterment of the future generation.

Nomenclature

Φ	:	Angle of friction
C&D	:	Construction & Demolition
G	:	Specific Gravity
w	:	Moisture Content
MDD	:	Maximum Dry Density
OMC	:	Optimum Moisture Content
DBW	:	Demolished Brick Waste
DST	:	Direct Shear Test
UCS	:	Unconfined Compressive Strength
CBR	:	California Bearing Ratio
W_L	:	Liquid Limit
W_P	:	Plastic Limit
IS	:	Indian Standard

Acknowledgement

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MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

(Formerly Known as West Bengal University of Technology)

SUBJECT WISE Continuous Assessment MARKS : 2023-24

DR. B. C. ROY ENGINEERING COLLEGE, DURGAPUR Bachelor of Technology in Civil Engineering SEM-3

SUBJECT NAME : Biology for Engineers - CE(BS)301

Marks For : Continuous Assessment

Sr. No.	Roll No./ NAME	CA4(out of 25)
1	12001322001 - AKASH GANGULY	19
2	12001322002 - NABAJYOTI HALDAR	20
3	12001322003 - ABHISHEK GHOSH	20
4	12001322004 - PRALAY KANTI DAN	20
5	12001322005 - SHOVAN GHOSH	20
6	12001322006 - ASHISH KUMAR	18
7	12001322007 - SUKESH MAHATO	18
8	12001322008 - ABHIMANYU KUMAR RAVI	18
9	12001322009 - DHIRENDRA KUMAR	18
10	12001322010 - UTSAB MITRA	19
11	12001322011 - NAWED SHAKIL	19
12	12001322012 - ADITYA MADHUKAR	20
13	12001322013 - CHINMAY JETHI	16
14	12001322014 - AKASH RAJAK	16

TOTAL MARKS ENTERED : 14 out of 53

*** NOTE - Those Students Marks are Submitted & Locked will appear in the lists.**

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

(Formerly Known as West Bengal University of Technology)

SUBJECT WISE Continuous Assessment MARKS : 2023-24

DR. B. C. ROY ENGINEERING COLLEGE, DURGAPUR Bachelor of Technology in Civil Engineering SEM-3

SUBJECT NAME : Engineering Mechanics - CE(ES)301

Marks For : Continuous Assessment

Sr. No.	Roll No./ NAME	CA4(out of 25)
1	12001322001 - AKASH GANGULY	20
2	12001322002 - NABAJYOTI HALDAR	23
3	12001322003 - ABHISHEK GHOSH	23
4	12001322004 - PRALAY KANTI DAN	23
5	12001322005 - SHOVAN GHOSH	23
6	12001322006 - ASHISH KUMAR	19
7	12001322007 - SUKESH MAHATO	20
8	12001322008 - ABHIMANYU KUMAR RAVI	19
9	12001322009 - DHIRENDRA KUMAR	21
10	12001322010 - UTSAB MITRA	21
11	12001322011 - NAWED SHAKIL	24
12	12001322012 - ADITYA MADHUKAR	21
13	12001322013 - CHINMAY JETHI	22
14	12001322014 - AKASH RAJAK	19

TOTAL MARKS ENTERED : 14 out of 53

*** NOTE - Those Students Marks are Submitted & Locked will appear in the lists.**

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

(Formerly Known as West Bengal University of Technology)

SUBJECT WISE Continuous Assessment MARKS : 2023-24

DR. B. C. ROY ENGINEERING COLLEGE, DURGAPUR Bachelor of Technology in Civil Engineering SEM-3

SUBJECT NAME : Energy Science & Engineering - CE(ES)302

Marks For : Continuous Assessment

Sr. No.	Roll No./ NAME	CA4(out of 25)
1	12001322001 - AKASH GANGULY	22
2	12001322002 - NABAJYOTI HALDAR	22
3	12001322003 - ABHISHEK GHOSH	19
4	12001322004 - PRALAY KANTI DAN	19
5	12001322005 - SHOVAN GHOSH	19
6	12001322006 - ASHISH KUMAR	13
7	12001322007 - SUKESH MAHATO	22
8	12001322008 - ABHIMANYU KUMAR RAVI	22
9	12001322009 - DHIRENDRA KUMAR	19
10	12001322010 - UTSAB MITRA	22
11	12001322011 - NAWED SHAKIL	23
12	12001322012 - ADITYA MADHUKAR	22
13	12001322013 - CHINMAY JETHI	21
14	12001322014 - AKASH RAJAK	17

TOTAL MARKS ENTERED : 14 out of 53

*** NOTE - Those Students Marks are Submitted & Locked will appear in the lists.**

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

(Formerly Known as West Bengal University of Technology)

SUBJECT WISE Continuous Assessment MARKS : 2023-24

DR. B. C. ROY ENGINEERING COLLEGE, DURGAPUR Bachelor of Technology in Civil Engineering SEM-3

SUBJECT NAME : Mathematics-III (Transform & Discrete Mathematics) - CE(BS)302

Marks For : Continuous Assessment

Sr. No.	Roll No./ NAME	CA4(out of 25)
1	12001322001 - AKASH GANGULY	14
2	12001322002 - NABAJYOTI HALDAR	14
3	12001322003 - ABHISHEK GHOSH	14
4	12001322004 - PRALAY KANTI DAN	14
5	12001322005 - SHOVAN GHOSH	15
6	12001322006 - ASHISH KUMAR	13
7	12001322007 - SUKESH MAHATO	16
8	12001322008 - ABHIMANYU KUMAR RAVI	6
9	12001322009 - DHIRENDRA KUMAR	16
10	12001322010 - UTSAB MITRA	15
11	12001322011 - NAWED SHAKIL	14
12	12001322012 - ADITYA MADHUKAR	12
13	12001322013 - CHINMAY JETHI	10
14	12001322014 - AKASH RAJAK	16

TOTAL MARKS ENTERED : 14 out of 53

*** NOTE - Those Students Marks are Submitted & Locked will appear in the lists.**

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

(Formerly Known as West Bengal University of Technology)

SUBJECT WISE Continuous Assessment MARKS : 2023-24

DR. B. C. ROY ENGINEERING COLLEGE, DURGAPUR Bachelor of Technology in Civil Engineering SEM-3

SUBJECT NAME : Humanities-I (Effective Technical Communication) - CE(HS)301

Marks For : Continuous Assessment

Sr. No.	Roll No./ NAME	CA4(out of 25)
1	12001322001 - AKASH GANGULY	20
2	12001322002 - NABAJYOTI HALDAR	19
3	12001322003 - ABHISHEK GHOSH	20
4	12001322004 - PRALAY KANTI DAN	22
5	12001322005 - SHOVAN GHOSH	21
6	12001322006 - ASHISH KUMAR	13
7	12001322007 - SUKESH MAHATO	15
8	12001322008 - ABHIMANYU KUMAR RAVI	13
9	12001322009 - DHIRENDRA KUMAR	17
10	12001322010 - UTSAB MITRA	21
11	12001322011 - NAWED SHAKIL	18
12	12001322012 - ADITYA MADHUKAR	22
13	12001322013 - CHINMAY JETHI	16
14	12001322014 - AKASH RAJAK	10

TOTAL MARKS ENTERED : 14 out of 53

*** NOTE - Those Students Marks are Submitted & Locked will appear in the lists.**

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

(Formerly Known as West Bengal University of Technology)

SUBJECT WISE Continuous Assessment MARKS : 2023-24

DR. B. C. ROY ENGINEERING COLLEGE, DURGAPUR Bachelor of Technology in Civil Engineering SEM-3

SUBJECT NAME : Introduction to Civil Engineering - CE(HS)302

Marks For : Continuous Assessment

Sr. No.	Roll No./ NAME	CA4(out of 25)
1	12001322001 - AKASH GANGULY	23
2	12001322002 - NABAJYOTI HALDAR	25
3	12001322003 - ABHISHEK GHOSH	22
4	12001322004 - PRALAY KANTI DAN	23
5	12001322005 - SHOVAN GHOSH	23
6	12001322006 - ASHISH KUMAR	15
7	12001322007 - SUKESH MAHATO	18
8	12001322008 - ABHIMANYU KUMAR RAVI	19
9	12001322009 - DHIRENDRA KUMAR	19
10	12001322010 - UTSAB MITRA	24
11	12001322011 - NAWED SHAKIL	19
12	12001322012 - ADITYA MADHUKAR	23
13	12001322013 - CHINMAY JETHI	24
14	12001322014 - AKASH RAJAK	20

TOTAL MARKS ENTERED : 14 out of 53

*** NOTE - Those Students Marks are Submitted & Locked will appear in the lists.**

Dr. B.C. Roy Engineering College, Durgapur
Department: Mechanical Engineering
Mentoring Activity for the Academic Year 2023-24 (Odd Sem)

Sl. No.	Name of the Student	Shivam Mishra	Raghunandan Kumar	Deepak Kumar	Aditya Vikram Poddar	Kushal Modak
1	University Roll	12000721029	12000721028	12000721027	12000721030	12000721031
2	RegistrationNo.	211200100710023	211200100710022	211200100710024	211200100710027	211200100710026
3	Email Id	10shivam.m@gmail.com	raghunandanverma5520@gmail.com	awadhdgr@gmail.com	poddaradityavikram@gmail.com	kushalmodak812@gmail.com
4	Mobile No	9110103587	9334222876	7047702161	7903656621	8597486587
5	Father's Name	Mr. Umesh Mishra	Mr. Ram Kumar Ram	Mr. Raj Kishore Ray	Mr. Basuki Nath Poddar	Mr. Dharma Das Modak
6	State of Domicile	Jharkhand	Jharkhand	Bihar	Bihar	West Bengal
7	Mobile No	9210104527	9124232876	9320104556	7802634851	8036987412
% of Class 10th Marks		89%	78.8%	70%	79%	84%
% of Class 12th Marks		78%	71%	65%	81%	78%
Field/Areas of Interest		Manufacturing Sector	Automobile Sector	Automobile Sector	Manufacturing Sector	Automobile Sector
1		Cricket	Football	Cricket	Football	Football
2		Autocad	C++	Autocad	C++	C++
3		Singing	Guitar	Karate	Singing	Guitar
4		Tennis	Cricket	Football	Cricket	Cricket

Dr. B.C. Roy Engineering College, Durgapur
Department : Mechanical Engineering
Mentoring Activity for the Session 2023-24 (Odd Sem)

Name of Student		Shivam Mishra	Raghunandan Kumar	Deepak Kumar	Aditya Vikram Poddar	Kushal Modak
University Roll		12000721029	12000721028	12000721027	12000721030	12000721031
Date	Activity					
	Semester Results Review & Suggestions	Sharp improvement from 1st to 2nd sem, then consistent	Suggest for improvement	Suggest for improvement	Suggest for improvement	Suggest for improvement
	Post CA1 discussion	Suggest to maintain the CA1 score for CA2	Suggest to maintain the CA1 score for CA2	Suggest to improve for CA2	Suggest to maintain the CA1 score for CA2	Suggest to maintain the CA1 score for CA2
	General discussion on academic progress	Suggest for preparing for facing job interview	Suggest for preparing for facing job interview	Suggest for preparing for facing job interview	Suggest for preparing for facing job interview	Suggest for preparing for facing job interview
	CA2 and PCA1 discussion	Suggest to maintain the CA2 score for CA3 & PCA1 score for PCA2	Suggest to maintain the CA2 score for CA3 & PCA1 score for PCA2	Suggest to improve for CA3 & PCA2	Suggest to maintain the CA2 score for CA3 & PCA1 score for PCA2	Suggest to maintain the CA2 score for CA3 & PCA1 score for PCA2
	Issues Raised	Discuss for MAR & MOOCS	Discuss for MAR & MOOCS	Discuss for MAR & MOOCS	Discuss for MAR & MOOCS	Discuss for MAR & MOOCS
	CA3 discussion and Doubts	Suggest to maintain the CA3 score for CA4	Suggest to maintain the CA3 score for CA4	Suggest to improve for CA4	Suggest to maintain the CA3 score for CA4	Suggest to maintain the CA3 score for CA4
	CA4 and PCA2 discussion	Suggest to prepare for final semester examination	Suggest to prepare for final semester examination	Suggest to prepare for final semester examination	Suggest to prepare for final semester examination	Suggest to prepare for final semester examination
	Discussion on MOOCS/MAR Progress/ Extracurricular activities	Suggest for attending course on core subject through NPTEL/COURSEERA	Suggest for attending course on core subject through NPTEL/COURSEERA	Suggest for attending course on core subject through NPTEL/COURSEERA	Suggest for attending course on core subject through NPTEL/COURSEERA	Suggest for attending course on core subject through NPTEL/COURSEERA
	Motivation for semester exam and practical	Highly interested in gaining knowledge of outside syllabus	Moderately motivated	Highly interested in gaining knowledge of outside syllabus	Highly interested in gaining knowledge of outside syllabus	Moderately motivated

Dr. B.C. Roy Engineering College, Durgapur
Department: Mechanical Engineering
Mentoring Activity for the Academic Year 2023-24 (Even/Odd Sem)

Sl. No.	Name of the Student	ARITRO NAYAK	SOHEL CHOWDHURY	SOUVIK PAL	SHUBHRADEEP DHARA	SOMNATH MUKHERJEE
1	University Roll	12000721001	12000721002	12000721003	12000721004	12000721006
2	RegistrationNo.					
3	Email Id	nayakaritro40@gmail.com	sohelsohelchowdhury80@gmail.com	souvikpal2200@gmail.com	dharashubhradeep194@gmail.com	mukherjeesomnath004@gmail.com
4	Mobile No	8391854823	9382213334	6296415516	8159838929	9635822328
5	Father's Name	Chiranjib Nayak	MOLOY CHOWDHURY	BANSI PAL	Naba Gopal Dhara	Barid Kumar Mukherjee
6	State of Domicile	Bihar	West Bengal	West Bengal	West Bengal	West Bengal
7	Mobile No	8617391730	9474111842	8670522463	9475018252	9064249763
% of Class 10th Marks		91.4	88.86	77	80.14	91.4
% of Class 12th Marks		94.2	89	91.6	90.4	93.8
Field/Areas of Interest						
		Playing games and cooking	Drawing	I like to collect old Indian coins.	Listening music, watching movie	Reading, playing

Dr. B.C. Roy Engineering College, Durgapur Department of Mechanical Engineering
Mentoring Activity for the Session 2023-24 (Even/Odd Sem)

Name of Student		**ARITRO NAYAK**	**SOHEL CHOWDHURY**	**SOUVIK PAL**	**SHUBHRADEEP DHARA**	**SOMNATH MUKHERJEE**
University Roll		**12000721001**	**12000721002**	**12000721003**	**12000721004**	**12000721006**
Date	**Activity**					
	Semester Results Review & Suggestions	Ok But Slight improvement needed	Need More Improvement	Need More Improvement	Ok But Slight improvement needed	Need More Improvement
	Post CA1 discussion	Try to maintain uniformity	Concentrate on Basics	Focus on Basics	Try to maintain uniformity	Try to improve more
	General discussion on academic progress	Try to Create a Strong Base for Interview	Try to Create a Strong Base for Interview	Try to Create a Strong Base for Interview	Try to Create a Strong Base for Interview	Try to Create a Strong Base for Interview
	Post CA2 and PCA1 discussion	Suggest to improve more	Suggest to maintain the CA2 score for CA3 & PCA1 score for PCA2	Suggest to improve more	Focus on Labs for PCA2	Suggest to improve more
	Issues Raised	MAR & MOOCS Activities	MAR & MOOCS Activities	Discuss for MAR & MOOCS	MOOCS activities	MAR & MOOCS Activities
	Post CA3 discussion and Doubts	Suggest to improve for CA4	Suggest to maintain the CA3 score for CA4	Suggest to improve for CA4	Suggest to maintain the CA3 score for CA4	Suggest to maintain the CA3 score for CA4
	CA4 and PCA2 discussion	Suggest to prepare for final semester examination	Suggest to prepare for final semester examination	Suggest to prepare for final semester examination	Suggest to prepare for final semester examination	Suggest to prepare for final semester examination
	Discussion on MOOCS/MAR Progress/ Extracurricular activities	Suggest for attending course on core subject through NPTEL/COURSEERA	Suggest for attending course on core subject through NPTEL/COURSEERA	Suggest for attending course on core subject through NPTEL/COURSEERA	Suggest for attending course on core subject through NPTEL/COURSEERA	Suggest for attending course on core subject through NPTEL/COURSEERA
	Motivation for semester exam and practical	Moderately motivated	Need more improvement	Highly Energetic	Need more improvement	Highly interested in gaining knowledge of outside syllabus

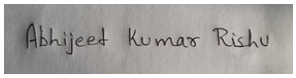
A Nayak Sohel Chowdhury Shubhradeep Dhara

GATE 2022 Scorecard

Graduate Aptitude Test in Engineering (GATE)

अभियांत्रिकी स्नातक अभिक्षमता परीक्षा

Name of Candidate	ABHIJEET KUMAR RISHU
Parent's/Guardian's Name	BALKRISHNA DAS
Registration Number	CE22S54046199
Date of Birth	14-Dec-1998
Examination Paper	Civil Engineering (CE)



GATE Score:	369	Marks out of 100*:	32.3		
All India Rank in this paper:	11385	Qualifying Marks**	General	EWS/OBC (NCL)	SC/ST/PwD
Number of Candidates Appeared in this paper:	100043		30.4	27.3	20.2

Valid up to 31st March 2025

Prof. Ranjan Bhattacharyya

Organising Chairman, GATE 2022

on behalf of NCB–GATE, for MoE

2b2c673b015f544a5c0c5a1aecda40c8

** Normalized marks for Civil Engineering (CE) and Mechanical Engineering (ME) Papers*

*** A candidate is considered qualified if the marks secured are greater than or equal to the qualifying marks mentioned for the category for which valid category certificate, if applicable, is produced along with this score card.*

Organising Institute: Indian Institute of Technology Kharagpur

General Information

The GATE 2022 score is calculated using the formula

$$\text{GATE Score} = S_q + (S_t - S_q)\frac{(M - M_q)}{(M_t - M_q)}$$

where,

M is the marks obtained by the candidate in the paper, mentioned on this GATE 2022 scorecard

$\mathbf{M}_q$ is the qualifying marks for general category candidate in the paper

$\mathbf{M}_t$ is the mean of marks of top 0.1% or top 10 (whichever is larger) of the candidates who appeared in the paper (in case of multi-session papers including all sessions)

$\mathbf{S}_q = 350$, is the score assigned to $\mathbf{M}_q$

$\mathbf{S}_t = 900$, is the score assigned to $\mathbf{M}_t$

In the GATE 2022 score formula, $\mathbf{M}_q$ is 25 marks (out of 100) or $\mu + \sigma$, whichever is greater. Here μ is the mean and σ is the standard deviation of marks of all the candidates who appeared in the paper.

Qualifying in GATE 2022 does not guarantee either an admission to a post-graduate program or a scholarship/assistantship. Admitting institutes may conduct further tests and interviews for final selection.

Graduate Aptitude Test in Engineering (GATE) 2022 was organized by Indian Institute of Technology Kharagpur on behalf of the National Coordination Board (NCB) – GATE for the Department of Higher Education, Ministry of Education (MoE), Government of India.

Organising Institute
Indian Institute of Technology Bombay

GATE 2021 Scorecard

Graduate Aptitude Test in Engineering (GATE)

GATE 2021 GRADUATE APTITUDE TEST IN ENGINEERING

Candidate's Details

Name

ARNAB KUMAR BARMAN

Parent's / Guardian's Name

JOGESH CHANDRA BARMAN

Registration Number

CE21S16043130

Date of Birth

07-Apr-1992

Examination Paper

Civil Engineering (CE)

(Candidate's Signature)

Performance

GATE Score	281		
Marks out of 100*	22.67		
Qualifying Marks**	29.2 (General)	26.2 (EWS/OBC (NCL))	19.4 (SC/ST/PwD)

Number of Candidates Appeared in this paper	115270
All India Rank in this paper	24997

Valid up to 31st March 2024

19th March 2021

Prof. Deepankar Choudhury
Organising Chairperson, GATE 2021
(on behalf of NCB - GATE, for MoE)

5df0e9f5590aed63708e15ec62339dba

* Normalized marks for Civil Engineering (CE), Computer Science and Information Technology (CS) and Mechanical Engineering (ME) Papers.

** A candidate is considered qualified if the marks secured are greater than or equal to the qualifying marks mentioned for the category for which valid category certificate, if applicable, is produced along with this scorecard.

The GATE 2021 score is calculated using the formula

$$GATE\ Score = S_q + (S_t - S_q)\frac{(M - M_q)}{(\overline{M}_t - M_q)}$$

where,
$\boldsymbol{M}$ is the marks obtained by the candidate in the paper, mentioned on this GATE 2021 scorecard
$\boldsymbol{M_q}$ is the qualifying marks for general category candidate in the paper
$\overline{\boldsymbol{M}}_t$ is the mean of marks of top 0.1% or top 10 (whichever is larger) of the candidates who appeared in the paper (in case of multi-session papers including all sessions)
$\boldsymbol{S_q}$ = 350, is the score assigned to $\boldsymbol{M_q}$
$\boldsymbol{S_t}$ = 900, is the score assigned to $\overline{\boldsymbol{M}}_t$

In the GATE 2021 score formula, $\boldsymbol{M_q}$ is 25 marks (out of 100) or $\mu + \sigma$, whichever is greater. Here μ is the mean and σ is the standard deviation of marks of all the candidates who appeared in the paper.

Qualifying in GATE 2021 does not guarantee either an admission to a post-graduate program or a scholarship/assistantship. Admitting institutes may conduct further tests and interviews for final selection.

Codes for XE and XL Paper Sections (compulsory section and any other two sections)

XE: Engineering Sciences
A − Engineering Mathematics (compulsory)
B − Fluid Mechanics
C − Materials Science
D − Solid Mechanics
E − Thermodynamics
F − Polymer Science and Engineering
G − Food Technology
H − Atmospheric and Oceanic Sciences

XL: Life Sciences
P − Chemistry (compulsory)
Q − Biochemistry
R − Botany
S − Microbiology
T − Zoology
U − Food Technology

Graduate Aptitude Test in Engineering (GATE) 2021 was organized by Indian Institute of Technology Bombay on behalf of the National Coordination Board (NCB) - GATE for the Department of Higher Education, Ministry of Education (MoE), Government of India.

GATE 2023
Graduate Aptitude Test in Engineering
अभियांत्रिकी स्नातक अभिक्षमता परीक्षा

Scorecard

Name of Candidate	GOUTAM KUMAR
Parent's/Guardian's Name	RAMESH BHANDARI
Registration Number	CE23S84006246
Date of Birth	14-Feb-2001
Examination Paper	Civil Engineering (CE)

Goutam Kumar

GATE Score:	423	Marks out of 100*:	32.73		
All India Rank in this paper:	6682	Qualifying Marks**	General	EWS/OBC (NCL)	SC/ST/PwD
Number of Candidates Appeared in this paper:	83187		26.6	23.9	17.7

Valid up to 31st March 2026

Mohite

Prof. Preetamkumar M. Mohite
Organizing Chairman, GATE 2023
on behalf of NCB–GATE, for MoE

693ae9c61a2069522a1bcde140baf36e

** Normalized marks for Civil Engineering (CE) paper*

*** A candidate is considered qualified if the marks secured are greater than or equal to the qualifying marks mentioned for the category for which valid category certificate, if applicable, is produced along with this score card.*

General Information

The GATE 2023 score is calculated using the formula

$$\text{GATE Score} = S_q + (S_t - S_q)\frac{(M - M_q)}{(M_t - M_q)}$$

where,
M is the marks obtained by the candidate in the paper, mentioned on this GATE 2023 scorecard
M_q is the qualifying marks for general category candidate in the paper
M_t is the mean of marks of top 0.1% or top 10 (whichever is larger) of the candidates who appeared in the paper (in case of multi-session papers including all sessions)
S_q = 350, is the score assigned to M_q
S_t = 900, is the score assigned to M_t

In the GATE 2023 score formula, M_q is 25 marks (out of 100) or $\mu + \sigma$, whichever is greater. Here μ is the mean and σ is the standard deviation of marks of all the candidates who appeared in the paper.

Qualifying in GATE 2023 does not guarantee either an admission to a post-graduate program or a scholarship/assistantship. Admitting institutes may conduct further tests and interviews for final selection.

Graduate Aptitude Test in Engineering (GATE) 2023 was organized by Indian Institute of Technology Kanpur on behalf of the National Coordination Board (NCB) – GATE for the Department of Higher Education, Ministry of Education (MoE), Government of India.

GATE 2023
Graduate Aptitude Test in Engineering
अभियांत्रिकी स्नातक अभिक्षमता परीक्षा

Scorecard

Name of Candidate	MD IRFAN HUSSAIN ANSARI
Parent's/Guardian's Name	SHOUKAT ALI
Registration Number	CE23S76516313
Date of Birth	16-Sep-1996
Examination Paper	Civil Engineering (CE)

Md. Irfan Hussain Ansari

GATE Score:	335	Marks out of 100*:	25.34		
All India Rank in this paper:	12757	Qualifying Marks**	General	EWS/OBC (NCL)	SC/ST/PwD
Number of Candidates Appeared in this paper:	83187		26.6	23.9	17.7

Valid up to 31st March 2026

Mohitep

Prof. Preetamkumar M. Mohite
Organizing Chairman, GATE 2023
on behalf of NCB–GATE, for MoE

32cd798c9bc09b129c265192d0317650

** Normalized marks for Civil Engineering (CE) paper*

*** A candidate is considered qualified if the marks secured are greater than or equal to the qualifying marks mentioned for the category for which valid category certificate, if applicable, is produced along with this score card.*

General Information

The GATE 2023 score is calculated using the formula

$$\text{GATE Score} = S_q + (S_t - S_q)\frac{(M - M_q)}{(M_t - M_q)}$$

where,
M is the marks obtained by the candidate in the paper, mentioned on this GATE 2023 scorecard
M_q is the qualifying marks for general category candidate in the paper
M_t is the mean of marks of top 0.1% or top 10 (whichever is larger) of the candidates who appeared in the paper (in case of multi-session papers including all sessions)
S_q = 350, is the score assigned to M_q
S_t = 900, is the score assigned to M_t

In the GATE 2023 score formula, M_q is 25 marks (out of 100) or $\mu + \sigma$, whichever is greater. Here μ is the mean and σ is the standard deviation of marks of all the candidates who appeared in the paper.

Qualifying in GATE 2023 does not guarantee either an admission to a post-graduate program or a scholarship/assistantship. Admitting institutes may conduct further tests and interviews for final selection.

Graduate Aptitude Test in Engineering (GATE) 2023 was organized by Indian Institute of Technology Kanpur on behalf of the National Coordination Board (NCB) – GATE for the Department of Higher Education, Ministry of Education (MoE), Government of India.

GATE 2023
Graduate Aptitude Test in Engineering
अभियांत्रिकी स्नातक अभिक्षमता परीक्षा

Scorecard

Name of Candidate	KISALAY KUMAR
Parent's/Guardian's Name	SURENDRA PRASAD
Registration Number	CE23S73005313
Date of Birth	21-May-2000
Examination Paper	Civil Engineering (CE)

Kisalay Kumar

GATE Score:	562	Marks out of 100*:	44.37		
All India Rank in this paper:	2538	Qualifying Marks**	General	EWS/OBC (NCL)	SC/ST/PwD
Number of Candidates Appeared in this paper:	83187		26.6	23.9	17.7

Valid up to 31st March 2026

Mohite

Prof. Preetamkumar M. Mohite
Organizing Chairman, GATE 2023
on behalf of NCB–GATE, for MoE

e4e4487d2fcecd17f40bb5c87cf59c0e

** Normalized marks for Civil Engineering (CE) paper*

*** A candidate is considered qualified if the marks secured are greater than or equal to the qualifying marks mentioned for the category for which valid category certificate, if applicable, is produced along with this score card.*

General Information

The GATE 2023 score is calculated using the formula

$$\text{GATE Score} = S_q + (S_t - S_q)\frac{(M - M_q)}{(M_t - M_q)}$$

where,
M is the marks obtained by the candidate in the paper, mentioned on this GATE 2023 scorecard
M_q is the qualifying marks for general category candidate in the paper
M_t is the mean of marks of top 0.1% or top 10 (whichever is larger) of the candidates who appeared in the paper (in case of multi-session papers including all sessions)
S_q = 350, is the score assigned to M_q
S_t = 900, is the score assigned to M_t

In the GATE 2023 score formula, M_q is 25 marks (out of 100) or $\mu + \sigma$, whichever is greater. Here μ is the mean and σ is the standard deviation of marks of all the candidates who appeared in the paper.

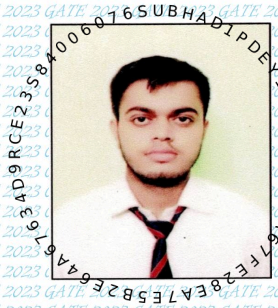
Qualifying in GATE 2023 does not guarantee either an admission to a post-graduate program or a scholarship/assistantship. Admitting institutes may conduct further tests and interviews for final selection.

Graduate Aptitude Test in Engineering (GATE) 2023 was organized by Indian Institute of Technology Kanpur on behalf of the National Coordination Board (NCB) – GATE for the Department of Higher Education, Ministry of Education (MoE), Government of India.

GATE 2023
Graduate Aptitude Test in Engineering
अभियांत्रिकी स्नातक अभिक्षमता परीक्षा

Scorecard

Name of Candidate	SUBHADIP DEY
Parent's/Guardian's Name	RAMARANJAN DEY
Registration Number	CE23S84006076
Date of Birth	26-Nov-1998
Examination Paper	Civil Engineering (CE)



Subhadip Dey

GATE Score:	386	Marks out of 100*:	29.63		
All India Rank in this paper:	8815	Qualifying Marks**	General	EWS/OBC (NCL)	SC/ST/PwD
Number of Candidates Appeared in this paper:	83187		26.6	23.9	17.7

Valid up to 31st March 2026

Mohite

Prof. Preetamkumar M. Mohite
Organizing Chairman, GATE 2023
on behalf of NCB–GATE, for MoE

294a08b1d52db09da7c5e5ab6c8403a8

** Normalized marks for Civil Engineering (CE) paper*

*** A candidate is considered qualified if the marks secured are greater than or equal to the qualifying marks mentioned for the category for which valid category certificate, if applicable, is produced along with this score card.*

General Information

The GATE 2023 score is calculated using the formula

$$\text{GATE Score} = S_q + (S_t - S_q)\frac{(M - M_q)}{(M_t - M_q)}$$

where,
M is the marks obtained by the candidate in the paper, mentioned on this GATE 2023 scorecard
M_q is the qualifying marks for general category candidate in the paper
M_t is the mean of marks of top 0.1% or top 10 (whichever is larger) of the candidates who appeared in the paper (in case of multi-session papers including all sessions)
S_q = 350, is the score assigned to M_q
S_t = 900, is the score assigned to M_t

In the GATE 2023 score formula, M_q is 25 marks (out of 100) or $\mu + \sigma$, whichever is greater. Here μ is the mean and σ is the standard deviation of marks of all the candidates who appeared in the paper.

Qualifying in GATE 2023 does not guarantee either an admission to a post-graduate program or a scholarship/assistantship. Admitting institutes may conduct further tests and interviews for final selection.

Graduate Aptitude Test in Engineering (GATE) 2023 was organized by Indian Institute of Technology Kanpur on behalf of the National Coordination Board (NCB) – GATE for the Department of Higher Education, Ministry of Education (MoE), Government of India.