



AADHARSHILA

The Annual Newsletter of the Department of Civil Engineering
Assam Engineering College

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Principal's Message

It gives me immense pleasure to learn that the Civil Engineering Department, Assam Engineering College is coming up with its eighth edition of the Annual newsletter entitled 'Aadharshila'. I hope it will help in creating a healthy environment for the students. I wish them all the success for future issues to come.



Dr. Atul Bora
Principal
Assam Engineering College

HoD's Message

It gives me immense pleasure to present to you the 8th issue of Aadharshila, the annual newsletter of the Civil Engineering Department of Assam Engineering College. I would like to convey my best wishes to all the concerned members for making it a success. I hope this edition will maintain the high standards of the previous ones and will prove beneficial to all concerned. The Department is determined to uphold the same standards in the coming years and serve the society better.



Dr. P.J. Hazarika
Professor & Head
Civil Engineering Department

EDITORIAL

At the very outset, we, on behalf of the student fraternity of the Department of Civil Engineering, Assam Engineering College, would like to extend our heartiest welcome to you to the Eighth Edition of AADHARSHILA, the annual departmental newsletter. “Little drops of water make a mighty ocean”, these words have never been proven truer as the hard work and perseverance of every person, directly or indirectly involved, have helped give shape to this testimony of rich heritage, that is the Civil Engineering Department of Assam Engineering College.

The history of the Civil Engineering Department of Assam Engineering College dates back to 1955 when it was known as “Assam Civil Engineering College”. Since then the department has excelled in the field of research and academics and has become a pioneer in the field of technical education and development. To acknowledge and document the various developments and achievements that took place in the department, the idea of AADHARSHILA was brought to life on 25th January, 2013. The newsletter showers light on the various achievements, research developments, events and other glories of the department to the students in a nutshell so that it motivates and provides an insight into the vast opportunities in the field of civil engineering.

Here we would like to express our heartfelt gratitude to the people who played an inseparable role in the journey of this newsletter from our vision to black and white. First of all, we would like to express our sincere gratitude and heartiest thanks to Dr. Atul Bora, Principal, Assam Engineering College, and Dr. Palash Jyoti Hazarika, Head of the Department, for allowing us to publish the newsletter. We feel privileged to extend our deep sense of gratitude and appreciation to Dr. Bibhash Sharma, professor-in-charge of AADHARSHILA whose valuable guidance and generous help inspired us in the successful publication of this newsletter. The contributions of our teachers Dr. Jayanta Pathak, Dr. Malaya Chetia, Mr. Bibhuti B. Bhardwaj and Ms. Jayashree Hazarika can never be foregone and we are immensely grateful for their timely advice and their perseverance along with us, in shaping the newsletter as the way it is. We would like to thank our respected faculty members and also the non-teaching staff of the department whose support and motivation have been relentless.

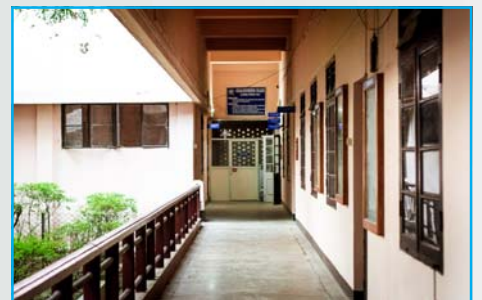
We hope our efforts have been fruitful in providing a birds-eye view of the department and with a prayer for its success, we would like to present the 8th issue of AADHARSHILA for one and all.

Editors



Aadharshila Committee

President	: Dr. Palash Jyoti Hazarika
Prof-in-charge	: Dr. Bibhash Sarma
Editors	: Harsita Kalita Abhinabh Buragohain Hena Chandini Devi
Faculty members	: Dr. Jayanta Pathak Dr. Malaya Chetia Mr. Bibhuti B. Bhardwaj Ms. Jayashree Hazarika
Name & Logo	: Priyanka Kotoky
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CIVIL ENGINEERING DEPARTMENT



FACE OF THE ISSUE

In conversation with Prof. S. K. Bhagabati

Prof. Sunit Kumar Bhagabati, Department of Civil Engineering, Assam Engineering College retired from his service as an associate professor on 31st January 2019 after serving for about 28 years. Prof. Bhagabati was one of the faculty members of this college who relentlessly worked for the development of the college every day during his tenure. Since he was also very popular amongst the students so the editors of this issue of Aadharshila made a visit to his residence in Beltola, Guwahati for an interaction, where he expressed his views on various issues and the future generations of the college can learn from his wise words, which they will miss inside their classrooms. The editors interacted with him for nearly two hours. He patiently answered all the questions asked to him. Some of the questions and his answers to them are as followed.

- Sir, please tell us about yourself and your journey in the field of civil engineering. What inspired you to become a professor?
- ▶ I was born in a village called Kuruabahi Satra in Nagaon district which was quite rich, both socially and economically. I completed my education up to the lower primary level in my village and then I joined Sainik School, Goalpara in 1968 following my father's advice, who was in the army under the British era. So, from class five I continued my studies in Sainik School after having dropped class 4 in between. I was just nine and a half years old at that time whereas the others were much older. Because of that, I could not perform well academically as well in sports initially. However, I developed myself in the field of drawing as well as in drama. We used to be a very disciplined set of people. But at the time of class 9, it became equal and I started performing well in my studies also. In 1975 I passed class 11 from Sainik School with first division and 71% and went to Saint Anthony college for a year. For future studies I was confused between architecture and engineering and but I chose civil engineering and I applied in many colleges and almost got admission to all the places. I finally chose REC Tiruchirappalli and started my journey of civil engineering in that college in south India. I loved south India, I love their culture their food, their way of living and everything. I completed my 5 years engineering course in 1981.

I got placed in a sugar mill there but I wanted to come back to Assam and I think that was because at that time Assam movement was going on and I had a strong sentiment for my motherland. I first joined under the Assam government in the construction work of Hindustan Paper Mill, Jagiroad for six months. Then I

got an appointment letter for Assam Engineering College as well as for PWD at the same time and I opted for AEC. I liked the place, the environment, the greenery of AEC, besides it was also paying me more than that of PWD. Some of my friends were studying here as students and so I felt more like a student at the time of joining. Initially, I didn't want to be in teaching throughout, in between I went to many places for construction also. I don't think at the age of 22, one can fix if he would become a professor; it's the trend that changes things.

- Sir, your specialization is Civil Engineering Planning. Can you tell us why and how did you choose this area?
- ▶ Already said I was confused between architecture and civil engineering. 'Planning' is the course which is given by most of the architectural college. At that time this course was only given by IIT Kharagpur, University of Roorkee and Indian Institute of Architecture Delhi. I wanted to spend some time in architecture so I went to Delhi. This course gives knowledge right from human Civilization to socialism, that is why I love this subject.





- You have contributed a lot to campus development of AEC, please tell us about it.
- ▶ On the campus, there are so many places where I can go and tell my son that this is what your father did right from the college gate. I developed a small canteen near the boys' hostel for student's convenience. I constructed a little Saraswati Temple in the Deepor Beel side but somehow it remained uncompleted. The whole area by the side of the Deepor Beel was developed when 33th National Game was held in Guwahati and the rowing competition was held in Deepor Beel. I developed the pyrokinesis stage during the same time bringing soil from the Deepor Beel site. The Iron pipes used for the stage were unused old water line pipes, bricks used there were also brought from dismantled buildings. Without any college finance, I completed that. Inside the college, the conference hall was my design and planning. I went for training on cost-effective building technology in Chennai and I made the building of AICTE in cost-effective ways. I avoided plastering it as I wanted to show the beauty of brickwork. it took me almost two years to complete it as I had to train up people for this unconventional technique. I was highly inspired by a famous architect named Laurie Baker. I developed a few minor things like the staircases to the gate of the girls' hostel, the front side of the market area, etc as well. I am not into social work but I initiated the Blood Donation camp in AEC with the help of GS and SWS at that time. I took initiative in the alumni association, conducting reunions and many other social events.
- We came to know that you have great skills in Martial arts as well as in acting, will you tell us more about this? Also, what do you think is the importance of co-curricular activities in the life of an engineer?
- ▶ I am a brown belt in Karate. I learned martial art after Class 11. I think I am quite fit even though I don't practice Martial art now. I have a pacemaker as well as a broken leg, so I am advised not to do that. I have already told that I was brought up in a very culturally active village, *Bhaona* was very famous at that time and it inspired me a lot. I acted in *Bhaona* in my village as well as in many dramas when I was studying in Sainik School. I have acted in a few dramas held in college reunion and golden jubilee celebration of AEC. There is also a VCD film where I acted with famous Assamese actress Chetana Das. Co-curricular activities help in refreshing mind. If you have a passion for something you should do it even if it doesn't give you any financial profit.
- You led in holding a survey camp outside the AEC campus. Would you share your experience of those days?
- ▶ Yes, we went outside the AEC campus for survey camp. We chose any village in Baihata Chariali area for surveying. It was a lot of fun, we interacted with the local people there and came to know there was a rumor that the camp was for a wedding. That is one funny incident about camp and there are many more. I made sure that everyone was fully disciplined. I used to stay in the tent while other faculty and girls used to stay in IB or other houses.
- Are you involved in any civil engineering work after your retirement?
- ▶ Currently, I am not involved in any civil engineering work, I am more into the spiritual and philosophical field now. Recently I got an offer to be a consultant in AICTE but I denied it because I like to work rather than advising.
- Would you like to tell us about any other topic of interest?
- ▶ I would love to see a Saraswati temple inside the AEC campus because when we pray, we always get courageous and only good thoughts come in mind. Also, I would love to see some well-maintained flower gardens inside the campus.
- What is your message to the future civil engineers of AEC?
- ▶ Whatever you do, if do it with love, you will be respected always. Do what makes you happy, not rich. When you start doing things that you love, you will find a way of making profits out of it.



INSIGHT

My experience in the ACEER 2019 Conference Kaohsiung, Taiwan

Dr. Binu Sharma
Professor

I attended the 2019 International Conference on Advances in Civil and Ecological Engineering Research (ACEER 2019), which was held at I-Shou University, Kaohsiung, Taiwan from July 1st to 4th, 2019 and delivered an invited talk on "Identification of liquefiable strata of Guwahati city using Ground Response Analysis". In the civil engineering session, I had a good exposure of determining the cyclic shear resistance of silty sandy soil deposits through the concept of equivalent granular void ratio presented by Daniela D Porcino from the University Mediterranea of Reggio Calabria, Italy. Another Good invited talk was on subsidence in soil induced by ground water withdrawal given by Dr. Dongyuan Wang from Southwest Jiaotong University, China. Other topics which attracted me were sustainable road management using low cost techniques and sustainable airfield pavement management using different pavement designs. There were also sessions on Environmental Engineering, Ecological Engineering and Ecological Systems.

Kaohsiung is a massive port city in southern Taiwan. The heart of Kaohsiung beats in its night markets which I visited where food, shopping and people come together on one long stretch of road. I also visited Qijin island which is a long slender island known as Qihou in earlier times. It is also known as the Lilliputian island and has numerous visitor attractions. I also had the good opportunity to visit the Buddhist center of South Taiwan, Fo Guang Shan Buddha Museum where Fo Guang Big Buddha statue, the largest bronze Buddha statue in the world is seated.



My experience in the youth exchange program in South Korea

Navonil Goswami
M.Tech 2nd semester, Water Resources Engineering

The month of November, 2019 brought along a staggering opportunity in my life as I received a confirmation mail from the Ministry of Youth Affairs and Sports (Central Govt.) stating that I had been shortlisted to be a part of 23-member delegation which will be heading to South Korea for a Youth Exchange Program. It was indeed a matter of great privilege for me to have been bestowed with the honor to represent my college as well as my motherland Assam at an international platform. The Program was a collaborative effort by the Ministry of Youth Affairs and Sports, Govt of India and the Ministry of Gender Equality and Family, Republic of South Korea with an aim to improve bilateral ties between the two countries and plan for further economic development through a medium of culture, idea and technology exchange. It was a 2 week long program covering 4 cities (Incheon, Seoul, Suwon, Busan) where we were taken to various educational institutions, historical sites, museums, ministry offices and headquarters, UN peace memorial, UN war memorial, car manufacturing units etc. We were also very fortunate to have interacted with the youth from South Korea where we exchanged our ideas on the contrasting yet colorful cultures of both the countries, the education system prevailing in both the countries, the prevalent employment scenario, scope for entrepreneurial development and possibilities to improve trade relations between the two South Asian countries. We also took part in debates and discussion on gender equality and focused on the fact that South Korea being a developed nation utilizes gender equality as a tool towards further development and growth. Furthermore, it was astonishing for us to see the level of technological advancements and research work undertaken whether it be in the Hyundai car manufacturing unit or be it the Samsung Innovation center which made the trip even more exciting for us.

Considering my course of short stay of 12 days in South Korea, it was an invaluable experience for a lifetime, learning and exchanging our way of lives. Some small yet



influential factors that differentiate the livelihoods in both the countries are that South Koreans are way more punctual, sincere and hardworking which reflects in the fact that they are already a developed nation progressing vigorously although having attained independence a year later than us on 15th August, 1948. These are certain values that we should also incorporate in our lives to enhance the quality of any work we are engaged with which in turn, will pace up the wheels of development and growth in our country as well. Such programs serve as a wonderful learning and sharing platform where the youth population can incorporate knowledge and skills to prepare for a better and brighter tomorrow.



Teachers' day celebration at the department

This year's Teachers' Day celebration had been a major success. The initiative was taken by the B.Tech 3rd semester students of the department with aided help from their seniors. The venue for the function was room no. 2, which was decorated beautifully by the students for the occasion. After the faculty members arrived, the event commenced with some cultural performances from the students. This was followed by the teachers reminiscing



out loud their experience as students which had been rather entertaining and yet eye-opening for everyone present because it let everyone take a glimpse into those long-lost days of their carefree youth. This was followed by the cutting of the grand Teachers' Day cake which was met with a loud applause. Furthermore, all the teachers were honoured in the traditional way with *gamochas*.



After this, refreshments were provided to everyone gathered for the event. And last but not the least, there was a joint photo session to serve as loving memory of the day.



TRIBUTE

In Memory of Technical Legend Dr. Madan Mohan Das



Dr. Madan Mohan Das, the legendary Professor, who inspired a generation of engineers in the field of water resources left for heavenly abode on 9th September 2019. His contribution towards overall technical education in Assam and in the field of hydraulics for the globe is well recognised by all concerned.

Dr. Das was born on April 1, 1942 at Bhotepowabodi village of Baghmara under Barpeta district of Assam. His father was late Madhab Chandra Das and mother was late Jayanti Das. He started his schooling at Boroshidhoni M.V. School and later he had completed his matriculation from Jalah high school in 1959 with letter marks in three subjects and secured highest marks in Sanskrit for which he was awarded with two gold medals from Gauhati University. He was good in academics and cleared his I.Sc from Cotton College, Guwahati in 1961, securing 1st division with distinction in Mathematics. In 1965, he completed his B.E degree with 1st class 1st position from Assam Engineering College under Gauhati University. In order to pursue his interest in academic profession, he joined Assam Engineering College as a lecturer in Civil Engineering Deptt.

Thereafter in 1968, he had been to USA and enrolled at Cornell University of New York to study M.S. degree in Hydraulic Engineering. After completion of the course, he returned back to the Assam Engineering College and joined in the same post.

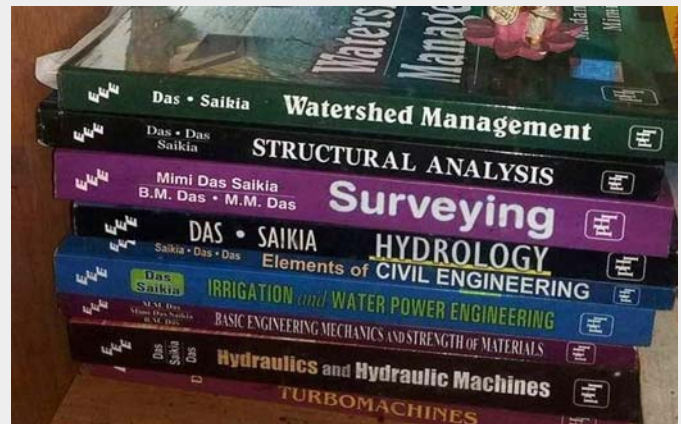
Again in 1974, he moved to Great Britain for his PhD degree at the University of Strathclyde, Glasgow, UK. During his research period (1974- 1978), in Hydraulic Engineering

Dr. Bharati Medhi Das
Asst. Professor

he had developed world famous Barr and Das formula for which he received international appreciation and was awarded by Telford Premiums in 1981 by the council of Institution of Civil Engineering, London.

Even after getting scope for service in developed foreign countries, he returned back to Assam to provide his knowledge to his people. He was a man very much close to his own soil and people and worked sincerely and dedicatedly for the upliftment of technical education and socio economic development of Assam.

During his service period in both Jorhat & Assam Engineering College, those students who came to his attachment, can never forget his teaching techniques and the way he would present his presentation in the classroom. He was very talented and his dedication towards the profession of teaching was the sole reason of his popularity among the students. He was known for explaining complicated theory of Hydraulic Engineering in a very simple way, so that student can understand easily. His memory power was also very sharp not only with the text and books but also with people and relationship which can be known by the fact that he could recognise any former students with name and year of passing when he met them after a long period.





In 1996, he was appointed as Director of Technical Education, Govt of Assam and continued the post till 2000 and got superannuation.

During his four years tenure as Director, he was associated with many technical education board as a Board member under Central and State govt. and got opportunity to reform and develop in technical education system and also visited foreign countries like China, Malaysia, Singapore etc. Even during this period, he kept continuing teaching and research work and guided many students for PhD degree. Immediately after his retirement, he was being nominated as Emeritus Fellow from All India Council for Technical Education (AICTE) for two years in Assam Engineering College. He had published more than hundred numbers of research papers in reputed National and International research Journals and Conference volumes. After his retirement, he was quite busy with writing books and contributed ten numbers of valuable Civil Engineering text books published by the Prentice Hall of India Pvt Ltd.(PHI) which itself is an honour. Presently these books are used as text books for engineering students of various Universities all over the country. Under his guidance thirteen number of students received PhD degree.

He was married to Lalita Das. They have two children and both are well established.

Dr. Das served Civil Engineering Department of AEC as a professor for a duration of almost 35 years. Even after his retirement, he was always available for advice on research topics and other academic matters. On his death, Assam lost a great soul. The void created by his absence is difficult to be filled up. May his soul rest in peace.



Last visit of Prof. M.M. Das to the Civil Engg. Deptt. on 24th March, 2018

EVENTS

COSVARD 2019 - A brief report

The second International Conference on Smart Villages and Rural Development (COSVARD), 2019, was held at the Assam Administrative Staff College during 3-6 Dec, 2019 under the joint auspices of the University of Melbourne, Australia and Assam Engineering College (AEC). The conference brought together subject matter experts, practitioners and senior public officers involved in the development of rural communities from several countries.

During its second edition of COSVARD, 25+ research papers were presented by experts from various countries to disseminate relevant scientific knowledge for the necessary development of the rural communities in the State and to facilitate the development of smart villages in the state.

A team of experts participating in COSVARD 2019 from the University of Melbourne, Australia included Dr. Hemanta Doloi, Prof. Mark Burry, Associate Professor Robert Crawford, and Dr. Sally Donovan. Dr. Atul Bora, Principal of AEC and Director, Technical Education, Assam was the chair of the organizing committee of COSVARD 2019.

The Honourable Minister of Education, Sjt. Siddhartha Bhattacharyya released the 'Policy Framework for Smart Villages in Assam' at the inaugural session of the COSVARD, 2019. The framework is a product of the collaborative research work of the University of Melbourne and AEC. The policy framework comprises ten key areas -



Inaugural Session



Participants

employment and income, education, agriculture, housing, energy, waste management, water and sanitation, transport, health, and environment. This policy framework for smart villages in Assam has been developed based on the empirical research conducted across 37 villages in Majuli. It provides some unique sets of recommendations that support the uplift of rural communities in Assam. The research conducted by the Smart Villages Lab at the University of Melbourne under the leadership of Dr. Hemanta Doloi, an Assamese academic, in collaboration with AEC under the auspices of the Government of Assam's 'Smart Villages' initiative, tells about some of the world's best practices in developing rural communities. It is aimed at improving the living conditions of over 2.8 crore people living in 26,000 Assam villages. The technical sessions had a keynote address by Prof. K.C. Iyer, IIT Delhi on rural development, construction and project finance and Prof Nagesh Kolagani from Centurion University, Odisha on developing and deploying mobile and web-based public participatory GIS, participatory modeling and AI/ML solutions for use by farmers. Dr. Atul Bora made a keynote presentation on a roadmap for multi-skilling, employability, and sustainability.

Ten-day workshop on AutoCAD under TEQIP-III

A ten-day workshop on AutoCAD software was conducted by the Civil Engineering Department of Assam Engineering College, under TEQIP-III for the Second Year, B.E. students. A total of forty-nine students had participated in this workshop.

The workshop was conducted in the month of November, 2018 and coordinated by Dr. Sasanka Borah and Mr.



Bibhuti B. Bhardwaj of the department. The resource person for this workshop was Mr. Rejaur Rahman, Mechanical Engineering Department, AEC. The workshop, which was held in the Computer Laboratory of the Mechanical Engineering Department, was a highly enlightening affair on AutoCAD, a computer-aided design and drafting software whose importance cannot be downplayed in the modern world. A thorough explanation of the basic features and commands of the software was provided along with the modus operandi of creating complex structures on the software using those basic tools.

A certification examination was held in February, 2019. After the successful completion of this workshop and the aforementioned examination, the students were provided with certificates of completion.

Overall, the students were highly benefitted from such an exposure.





Industrial visit to Bhairabkunda weir project under TEQIP-III

An industrial visit to the Bhairabkunda weir project was organized on 30th of March, 2019 by the Civil Engineering Department. A total of ninety-one students of B.E. 6th semester participated in the trip along with four faculty members of the department viz. Mrs. Rhitwika Barman, Mr. Bibhuti B. Bhardwaj, Ms. Jayshree Hazarika and Ms. Rupali Sarmah.

The students assembled in front of the AEC canteen and the journey started at around 7:00 am from the college. Two buses were hired for the visit and breakfast was provided inside the buses. At around 11 a.m., the group reached the inspection bungalow of Irrigation Department, Dhansiri weir division where light refreshments were offered by Mr. Bijay Kumar, Executive Engineer of the division. He briefed the students on the geographical aspects of the irrigation project, constructed on the Dhansiri river at Bhairabkunda. The Dhansiri river is a major tributary of the Brahmaputra river. A guide dam has also been constructed inside Bhutan for this project.

The students were thus, further briefed on the various details of the project including the cost of construction, the advantages and the technical details. After this rudimentary introduction on the project, he led all the students to show the different components of the project. Hereby, the dam components and its structure were explained. The students were shown and explained the



functions and components of a weir, silt ejector, guide band, gangway slab, launching apron etc.

Bhairabkunda, being at the Indo-Bhutan border, the group took the opportunity to visit Jomotsankha, a small village inside the Bhutan territory. The group visited a suspension bridge present in the village. The group had their lunch followed by an enlightening speech from the executive engineer. The group finally departed back to Guwahati with lots of practical knowledge and some refreshing memories of the short yet exciting site visit.



Industry-Academia interaction for B.E. 8th semester students under TEQIP-III

A TEQIP-III sponsored Industry-Academia Interaction meet, organized by the Department of Civil Engineering at Assam Engineering College, was held on 14th June, 2019. Dr. Nripen Das (Registrar, Assam Science and Technology University), Dr. Girija T R (HoD, Civil Engineering Department, School of Technology, Assam Don Bosco University), Er. Devish Mazumdar (Project Manager, Numaligarh Refinery Ltd.) and Er. Ronen Sarma (Chief General Manager, NEEPCO Bhawan) were invited to address the B.E. 8th semester students of the department on their last official day on the college to give them a glimpse of what life would be like after they graduate.



Dr. Jayanta Pathak of Civil Engineering Department gave the welcome address followed by inaugural speech of the HoD of Civil Engineering Department. This was followed by the speech of the experts. The experts suggested the students to give more emphasis on learning and practising software such as AutoCAD, GIS, Primavera, SAP, etc. to make themselves industry ready. They also said that mock test is an important strategy to improve in written examination in different recruitment drives as well as in GATE examination. They asked the students not be afraid of taking challenges. This will prepare them for the challenges that may come in professional career also. Preparation for this should start from the beginning of the engineering graduate program. They suggested that aspiring students should try to go for higher studies without taking a break from the studies.



After this, experts shared their views on engineering ethics with the help of example of energy generation, rule curve, etc. This was followed by discussion and a few questions from the participants.

After completion of the question-answer session, feedback on the interaction meet was collected from the participants, which was followed by closing speech and vote of thanks by Dr. Jayanta Pathak. The participants were served with refreshments at the end of the meet.

Overall, the illustrations given by the resource persons inspired the students to think about the various career opportunities that await them and to decide what motivates them the most. After this interaction, it is hoped that the students would keep their eyes open for the different career opportunities and start preparing for the same.





Training programme on Advanced Pedagogy & Digital Tool at IIT Kharagpur under TEQIP-III

Advanced Pedagogy is the enhancement process of existing educational methods using smart digital tools for a better teaching experience and generation of passionate learning atmosphere. Teaching with technology has become a seamless extension of the course curriculum in major classrooms around the world. The Assistant Professors of the Civil department recruited by NPIU through TEQIP-III program attended a mandatory TEQIP training programme on “Advanced Pedagogy & Digital Tool” from



1st July to 5th July, 2019 at Gargi Auditorium, IIT Kharagpur. The total strength of all the participants at the event stood at 83.

The programme focussed on modern technologies that could be used to improve the teaching-learning process in classrooms. In present times, where the internet can be termed as the hub for educators and students alike, the role of faculty has also changed a lot to ensure the active participation of the students in a class. The use of digital tools such as Google Classroom, Kahoot, Moodle etc. in class helps to prove wrong the widely mentioned dilemma of “Twenty-first-century kids being taught by twentieth-century adults using nineteenth century curriculum and techniques on an eighteenth-century calendar!”. This training program dealt with advanced teaching methodologies along with a lot of modern tools that could be used in respective classrooms and was equipped with lectures on Skill vs Concept, Research Methodology, IPR Patents, MOOCs, etc. which also forms the vision and mission of TEQIP-III.

A hands-on session was conducted where the participants were trained on the dos and don'ts of recording a video lecture for NPTEL/MOOC course. The National Digital Library and its resources were explained in detail followed by a visit to the workspace of the National Digital Library

inside the IIT Kharagpur library. Demonstration and hands-on training on Moodle (used for conducting online test and classroom data management) were also given. Apart from these, the participants were also trained on the basics of Augmentative Reality (AR) and Virtual Reality (VR), which lead the future of teaching methodologies in the modern world. Lectures on topics like Teaching vs Mentoring, Life of Principal Investigator, entrepreneurship development, placement techniques, flipped classroom technique in outcome-based education, reforms in GATE and AICTE, etc. forced the participants to devote utmost sincerity and interactions while attending the sessions. The programme ended with the participants, divided in groups of three, giving a presentation on their respective “take-aways” from the programme.



Faculty Development Programme on Recent Advances in Concrete Technology under TEQIP-III

The Department of Civil Engineering, Assam Engineering College organized a 5-day Faculty Development Programme (FDP) on Recent Advances in Concrete Technology, held from 15th to 19th July, 2019. This programme was sponsored by TEQIP-III in collaboration with Assam Science and Technology University. The Coordinator of the FDP was Dr. Bipul Talukdar, Associate Professor of CED, AEC. He was aided by the two Assistant





Coordinators, Dr. Utpal Kumar Nath, Associate Professor, and Mrs. Rhitwika Barman, Guest Faculty.

The event highlighted the different aspects of modern concrete technology that have evolved as a result of rapid development in mechanized construction, the use of mineral and chemical admixtures in concrete, among others. Major issues in the field of construction, such as the practice of concreting in more challenging environments, better understanding of the material properties of concrete, emphasis on durability, different construction practices etc. were also studied in the FDP. A brief discussion on the maintenance of concrete structures, including non-destructive testing, evaluation criteria, repair, and rehabilitation, etc. was also included in the curriculum.

A total of thirty-eight participants from different engineering colleges and polytechnics joined the program. All the resource persons specialized in the field of concrete technology, hailing from IITs, NITs, institutes of national importance and prominent industries participated in the programme. Prof. Aminul Islam Laskar from NIT Silchar delivered lectures on the workability and strength of concrete. Dr. Elson John from MA College of Engineering,



Kerala discussed recent trends, admixtures and construction practices of concrete. Dr. Arun Borsaikia from IIT, Guwahati delivered a lecture on health monitoring of structures. Dr. Bipul Talukdar and Dr. Utpal Nath from the CED, Assam Engineering College also delivered lectures on durability and concrete mix design respectively. Dr. Sulaem Musaddiq Laskar from Jorhat Engineering College discussed about geopolymer concrete. Mr. Apurba Kumar Sarma from Shyam Steel Ltd. delivered a lecture on cement chemistry. Mr. Gautam Hazarika from Trine Construction Solutions discussed repair, retrofitting and rehabilitation of structures. On the last day, Mr. V Umamaheshwaran from L&T Construction B&F IC Chennai delivered lectures on self-compacting concrete and durable concrete. One laboratory session was also conducted on Non-Destructive Testing and one field visit was organized to "PRISM RMC" plant, Lakhra, Guwahati.

Hands-on training on total station and DGPS under TEQIP-III

A hands-on training on total station and Digital Global Positioning System (DGPS) was organized for three days





in Assam Engineering College for the B.E. 5th semester students of the Department of Civil Engineering under TEQIP-III. Total station is a combination of Electromagnetic Distance Measuring Instrument and electronic theodolite whereas DGPS is an enhancement to the Global Positioning System (GPS) which provides improved location accuracy. Both of these instruments are widely used in modern field of surveying. The resource persons for the workshop were Lakhi Kanta Das, Pinku Saikia, Pankaj Gohain and Hrishikesh Saikia from Scope International Pvt. Limited. The event was coordinated by Dr. Sasanka Borah and Mr. Bibhuti B. Bhardwaj of the department.



The equipment total station was demonstrated for two days where the students, due to their large number had been divided into two groups, with each group getting a day each for better accessibility and understanding. Because of the availability of two total stations, the two groups of students were further subdivided and hence, every student got a chance to work with the equipment and clear their doubts regarding the principles and functioning of the equipment. Then, the students were asked to survey on their own, under the guidance of the experts so that all that had been explained about the equipment were now put into practical use. Moreover, the students were given a basic idea of all the complex surveys that were carried out by this equipment and how Surveying had become much less laborious and more accurate with the use of total station.

The DGPS equipment was demonstrated on the third day. The experts shed some light on the principles behind the working of a DGPS. Moreover, a detailed working procedure was shown by the experts. The students were encouraged to clarify their doubts as well as to use the system for a thorough understanding. Being a highly advanced system, the experts encouraged the students to survey on their own under their guidance so that the students would receive practical knowledge on its mechanism. Furthermore, students were enlightened on the similarities and the dissimilarities on the surveys conducted by the total station and DGPS.

Industrial visit to Dalmia Cement Plant, Lanka under TEQIP-III

India is the second-largest producer of cement in the world. No wonder, India's cement industry is a vital part of its economy, employing more than a million people, directly or indirectly. Therefore, an Industrial visit for the students of B.Tech 3rd semester of the Civil Engineering Department of Assam Engineering College was on the 27th and 28th of





August, 2019 to Dalmia Bharat Cement Plant, situated in Lanka of Hojai district, Assam under TEQIP-III. This event had been planned to provide the students with a general idea on the manufacture of cement. The coordinators of the event were Dr. Jayanta Pathak, Professor and Mr. Bibhuti B. Bhardwaj, Asst. Professor of department of civil engineering.

For the convenience of the students and Dalmia Bharat Cement Plant, the students were divided into two groups; Group 1, consisting of 48 students, who visited the plant on 27th of August, accompanied by two faculty members and one office staff and Group 2 which consisted of the



rest 49 students, along with two other faculty members and one office staff who visited the plant on 28th August. The schedules for both days were the same. Students were asked to gather near the bus-stop of Assam Engineering College at around 6:30 am, wherefrom they left the campus by bus by around 7:00 am. Breakfast was provided during the journey. They reached their destination at around 11:30 am.

Promod Jena, Senior Manager (Quality Control) warmly welcomed the students in his opening address. Mr. Jaganibash Kalita, Mr. Dibyajyoti Dihingia, Mr. Mahalingam G., Mr. Suranjan Sarma, Mr. Pallabiyoti Sarma and Mr. Rinku Thakur were also present in the meeting. After a short tea break, the students were further divided into two subgroups. Subgroup-1 was taken to the seminar

hall to attend a brief presentation, given by Mr. Suranjan Sarma. In his presentation, he gave a general overview of the Dalmia cement plant as well as its history and achievements. The presentation was very elaborate and well composed with a lot of information on the cement manufacturing process, its market value, importance in construction, etc. Subgroup-2 was taken for a visit to certain units of the plant. Three engineers accompanied them to provide instructions and demonstrations. At first, they were taken to the control room of the plant, from where the whole cement manufacturing process is monitored. After that, they were taken to the quality control room. After that, the subgroups were exchanged and the presentation, as well as the visit, was repeated for the other subgroup.

The students were then taken near to the plant units. The Lanka plant of Dalmia Cement is a small unit, where the clinkers are not produced from the raw materials but rather comes directly from the other plant in Umrangshu, Assam. The students were given a tour around the plant where they got a chance to visit the sites where the materials (Clinkers, Gypsum and Fly-ash) are being kept, as well as the many components of the factory, such as the storage mill, rotary grinder, the silos, and the conveyor belts. The tour of the plant came to an end at around 2.30 pm. This tour provided the students with a basic understanding in practical terms on the components and the functioning of a general cement plant.

After the end of the tour, the students and faculty members were taken to the guest house, where lunch was arranged by the Dalmia group. After lunch, HR manager Mr. Dipen Mipun along with the other coordinators thanked everyone and gave some invaluable advice to the students about future endeavours.

The students along with the faculty members headed back from the plant at around 4 pm and reached campus by 8 pm. Overall, it had been an opportunity for the students to explore one of the very foundations of the industrial world.





Three-day workshop on Application of GIS in Civil Engineering under TEQIP-III

A three-day workshop was organized by the Department of Civil Engineering, Assam Engineering College, in collaboration with PSG College of Technology, Coimbatore from 9th to 11th of September, 2019. The workshop was on “Application of GIS in Civil Engineering”, sponsored by TEQIP-III. Dr. Sankarsubramanian G. (Professor and Head, Department of Civil Engineering, PSG College of Technology) and Dr. Elangovan K. (Professor, Department of Civil Engineering, PSG College of Technology) were the resource persons in the workshop.



An official introductory discussion was held in the morning session on the first day of the workshop which was followed by acknowledgment speeches by Dr. Atul Bora (Principal, Assam Engineering College), Dr. Palash Jyoti Hazarika (Professor and Head, Civil Engineering Department, Assam Engineering College), Dr. Sankarsubramanian G. and Dr. Elangovan K. along with the workshop coordinators Dr. Jayanta Pathak (Professor, Assam Engineering College) and Dr. Bipul Talukdar (Associate Professor, Assam Engineering College).



Soon after, refreshments were provided. After refreshments, the second session commenced with an introduction to Geographic Information System (GIS) by Dr. Elangovan K. In his lecture and presentation, he highlighted the basis of GIS. GIS software is interoperable, supporting many data formats used in the infrastructure life cycle and allowing civil engineers to provide data to various agencies in the required format while maintaining the data's core integrity.



On the second day of the workshop, a presentation was given on the application of GIS in the morning session. The students were given a general overview of the uses of GIS in civil engineering (Planning, Data collection, Environmental Analysis, Design, Construction, etc), Geology, Geography, Agriculture, Forestry, Disaster mitigation, Emergency planning, Utility management, Census, etc. Furthermore, presentations on Vector data models, GIS file formats, Preparation of maps were also given. Thereafter, Dr. Sankarsubramanian G. took a session on structural analysis by matrix method by providing an example of plotting locations using ArcGIS.

The last day of the workshop primarily focused on the hands-on-training of the basic GIS software. Live demonstration of Drawing GIS map from Earth View image, different types of error identification; source error, and processing error were some activities that were also accomplished on that day. Various GIS websites were provided for the participants to train themselves.

At the end of the productive three-day, workshop certificates were distributed to the respective participants by the professors and the workshop was concluded in a fecund manner with a delicious lunch arranged at the Hydraulics Laboratory of the department.

Two-day workshop on SAP-2000 and CSI-Bridge

A two-day workshop on SAP-2000 and CSI-BRIDGE was conducted on 16th and 17th of September, 2019 by the Department of Civil Engineering, Assam Engineering College. The workshop was open to Ph.D, M.Tech and B.E. final year students. The co-ordinators for this workshop were Dr. Jayanta Pathak and Mr. Bibhuti B. Bhardwaj. It was held in the CAD laboratory of the civil engineering department. The licensed software was preinstalled in the laboratory computers and the workshop was supervised by Mr. Rajiv Sharma from CSI Engineering Software Pvt. Ltd., New Delhi.

On the first day, Mr. Sharma began with the SAP-2000 v.21 software and the participants were taught the basics of the software including the various features on the menu bar, the construction of a building model, running the



analysis and interpretation of the results. They were also taught the various options of loading (point force, uniformly distributed loads, trapezoidal loads), the support conditions, material properties, defining frame sections, load cases and analysis options. Furthermore, they were acquainted with



interpreting the post analysis results, namely, shear force, bending moment and axial force in the beam. By the end of the session, the students were quite at ease with the SAP-2000 modelling and analysis.

The second day of the workshop began as a continuation of the previous day. Push-over analysis and time history analysis were explained in the first one and half hour of the session. After that Mr. Sharma commenced the CSI-Bridge modelling. Again, the basics of the software and step by step procedure on the modelling, application of loads, analysis and interpreting the results were shown to the students. The session concluded with Mr. Sharma giving a vote of thanks to everyone involved with the workshop.



Industrial visit to Prism RMC Plant, Lokhra under TEQIP-III

Department of Civil Engineering, Assam Engineering College organized an industrial visit under TEQIP-III for the B.E. 5th semester students to Prism RMC Plant, situated in Lokhra, Guwahati, Assam. Dr. Jayanta Pathak, Professor and Mr. Bibhuti B. Bhardwaj, Asst, Professor of the department coordinated the event. The RMC Ready-mix (India) is a division of Prism Cement Limited, which is an





integrated building materials company, offering a wide range of building materials from cement, aggregates, ready-mixed concrete, tiles along with bath and kitchen products.



The students visited the site in two separate groups each consisting of 32 students and accompanied by two faculty members. The first group visited the site on 19th September with Mrs. Rhitwika Barman (faculty) and Mr. Paban Bhattacharyya (staff) while the second group visited the following day with Ms. Mitali Mandal (faculty) and Mr. Niren Baishya (staff). Buses were scheduled at 12:30 p.m to carry the students from the department entrance gate on both days. Upon reaching the site the students were welcomed by Mr. Krishna Gopal Das, Customer Service Group, Prism Johnson Limited. He introduced the students to Mr. Rana Dey (Quality Control) and Mr. Debarshi Das (Production and Logistic) and explained their respective duties and works in the company. The employees spoke about the history and achieved targets and achievements of the company.

Safety gear was provided to each student and everyone was made familiar with the safety guidelines and protocols that need to be followed once inside the compound. After this the students were divided into two sub-groups, of 16 students each and taken to different work divisions. One group was taken to the laboratory where Mr. Rana Dey (Quality Control Officer), described the various tests carried out on the constituents of concrete. The students were able to properly understand the importance of quality in concrete production, how quality can deteriorate the strength of the concrete, how to test its quality and various ways to control concrete deterioration. The test processes were explained providing extra detail to the various apparatuses and machines in use. It was an interactive session where students learned about light weight concrete, fly-ash, admixtures, and pervious concrete.

During this time, the other sub group was taken to the plant where Mr. Debarshi Das (Production and Logistic), the Batch Operator explained the working of the batching plant. The software used for the batching was demonstrated and other details associated with batching were explained. This was followed by a visit to the stock yard where the coarse aggregates and fine aggregates were kept. A demonstration was given on how the hoppers for the aggregates and cement work. A transit mixer and a concrete pump were also shown and their workings were explained. Finally, at about 4.00 pm both the groups assembled together where a small snack packet had been arranged for everyone. The safety gears were returned and Mr. Krishna Das, along with his fellow coordinators, thanked everyone for their participation and enthusiasm and wished them success in their future endeavors. The students and faculties headed back from the plant at around 4.10 pm and reached the college campus at 4.40 pm.

The overall experience proved to be very enriching for each student as everyone got a hands-on experience about what



goes on into the working of a cement plant and its various functions. The visit further strengthened the theoretical classroom concepts of the participating students and made them enthusiastic and passionate about concrete technology.



One-day workshop on Finite Element Modelling using MIDAS under TEQIP-III

The Civil Engineering Department organized a one-day workshop on 'MIDAS-Civil' and 'GTS NX' Software for B.E. 7th semester students. The resource person who handled the event was Mr. Pratap Yadav from MIDAS. The workshop was coordinated by Dr. Diganta Goswami, Associate Professor.



The workshop started at 12:30 p.m. in Room No. 2 of Civil Engineering Department with the introductory speech given by Dr. Diganta Goswami. Thereafter, Mr. Pratap took over the workshop and began his detailed presentation on the capabilities and utilities of the MIDAS software. He talked about how the software has advanced the process of designing and constructing varied civil structures by being both user-friendly and providing unprecedented levels of efficiency.



After a small tea break, Mr. Nikhil, another employee of MIDAS explained about the various provisions by MIDAS. He spoke of MIDAS granting assistantship of Rs. 15,000/- along with training and placement opportunities to students.

Mr. Pratap then continued the workshop with the explanation of another software 'GTS-NX' which deals with various fields of Geotechnical Engineering and hand-in-hand demonstrated the modelling and analysis of pre-stressed bridges. Finally, a question-answer session was held to solidify the knowledge of the students on the basic working of 'MIDAS', 'GTS' and the workshop ended with a vote of thanks by the workshop coordinator Dr. Diganta Goswami. A total of 75 students were present in the workshop.

Faculty Development Programme on Industrial & Fire Safety under TEQIP-III

Department of Civil Engineering of Assam Engineering College organized a five-day Faculty Development Program (FDP) on 'Industrial & Fire Safety' from 4th to 8th November, 2019 under TEQIP-III. The chief resource person and course director for the event was Mr. Akhil Kumar Das and the other invited resource persons were Dr. Sailesh Banikya and Mr. Gopal Sarma. The FDP was coordinated by Dr. Jayanta Pathak, Professor, Department of Civil Engineering. He was assisted by Asst. Coordinator, Mr. Bibhuti B. Bhardwaj and Ms. Jayshree Hazarika.



The participants included faculty members from Civil, Mechanical, Electrical and Chemical Engineering Departments and also from Physics department. The total number of participants stood at 23.



The inaugural ceremony started at 9:30 AM on 4th November, 2019. The opening remarks were provided by Dr. Atul Bora, Principal, Assam Engineering College along with Dr. Palash Jyoti Hazarika, Head of the Department, Civil Engineering, Dr. Pradip Baishya, TEQIP Coordinator and Dr. Jayanta Pathak, Event coordinator. The Course Director, Mr. Akhil Kumar Das, was welcomed by the principal. The Course Director gave an overview of the entire programme and the inaugural program ended after being followed by high tea.



In the next session, the course coordinator conducted a quiz to evaluate the existing knowledge of the participants on fire safety engineering before proceeding further. The following sessions were conducted as per schedule until the end of the fourth day, where lots of interactions took place. The topics covered in the FDP included emergence of the field of QHSE (Quality, Health, Safety & Environment), development of formal learning programmes in Safety & related areas at universities and elsewhere, history and current status of NEBOSH, IOSH, CSP in India. He also discussed many case studies of major loss incidents due to fire, introduction to safety at workplaces, legal and other requirements on fire, safety and occupational health. Fire science, fire dynamics, fire protection systems, hazard identification, risk assessment and design aspects for fire safety were discussed in details by the resource person, Mr. Akhil Kumar Das.

On the fourth day the other two resource persons viz. Dr. Sailesh Banikya (Occupational Health Specialist) and Mr. Gopal Sarma (Chief General Manager, Operations, NRL) delivered their respective lectures on Occupational Health & Hygiene and Safety Practices & Management in Industry. On the fifth day, the group activity was conducted by the course director. The participants were divided into four groups according to their disciplines and all the groups were asked to come up with course outlines for a subject on fires safety as open elective and highlight a few areas where UG projects can be floated. This was followed by a second quiz and this time the participants found themselves performing better than the first one. Feedback was taken from the participants in the last session and soon thereafter the valedictory function started. It was presided over by the HoD, Department of Civil Engineering. Certificates were distributed among the participants and Dr. Jayanta Pathak, event coordinator offered the vote of thanks to everyone marking the end of this successful five-day long program.



TEQIP-III sponsored FDP on Disaster Risk Management at PSG College of Technology Coimbatore, Nov 11-16, 2019

A faculty development programme (FDP) was conducted by the Civil Engineering Department, Assam Engineering College in collaboration with PSG College of Technology at Coimbatore. The FDP was attended by more than 50 participants from various institutes and organization. Dr. K Prakasan, Principal In charge, PSG College of Technology and Dr. Atul Bora, Principal, Assam Engineering College were the joint chairs and Dr G. Sankarasubramanian Professor & Head Department of Civil Engineering, PSG College of Technology and Dr. Palash Jyoti Hazarika,

Professor & Head, Department of Civil Engineering, Assam Engineering College were the joint convenors of the programme.



Dr. Palash Jyoti Hazarika, Prof & Head, Department of Civil Engineering, Assam Engineering College- inaugural address



A section of participants



Dr. Diganta Goswami, Department of Civil Engineering, Assam Engineering College



Dr. Bipul Talukdar, Department of Civil Engineering, Assam Engineering College



Dr. Jayanta Pathak, Department of Civil Engineering, Assam Engineering College

The FDP covered various topics on DRM through lectures and discussions with the participants. The topics included the types of disasters and vulnerability profile of India, weather-related disasters like cyclone, flooding, tsunami and drought, earthquake and its effects, causes, effects and prevention of landslides, roles and responsibilities of government, community, local institutions, NGOs and other stakeholders, policies and legislation for disaster risk reduction, activities of National Disaster Management Authority in India, ICT initiative for disaster risk reduction and various case studies and demonstration.

The organizing secretaries of the FDP were Dr. K Elangovan, Professor and Mr. S Praveen Kumar, Assistant Professor of the Department of Civil Engineering, PSG



College of Technology. The resource persons from the Department of Civil Engineering, Assam Engineering College were Dr. Palash Jyoti Hazarika, Dr. Jayanta Pathak, Dr. Diganta Goswami, and Dr. Bipul Talukdar. There were the resource persons from the field and various organizations. They were - Dr. S. Balachandran, Deputy Director-General of Meteorology, Regional Meteorological Centre, Chennai, Dr. G. R. Dodagoudar, Professor, Geotechnical Division, Department of Civil Engineering, IIT Madras, Chennai, Dr. G. P. Ganapathy, Director, Centre for Disaster Mitigation and Management, VIT University, Vellore, Dr. G. Madhu, Professor, Chemical Engineering, Cochin University of Science and Technology, Dr. G. Ramasamy, Formerly Professor of Civil Engineering, IIT Roorkee.



Participants of the FDP on DRM

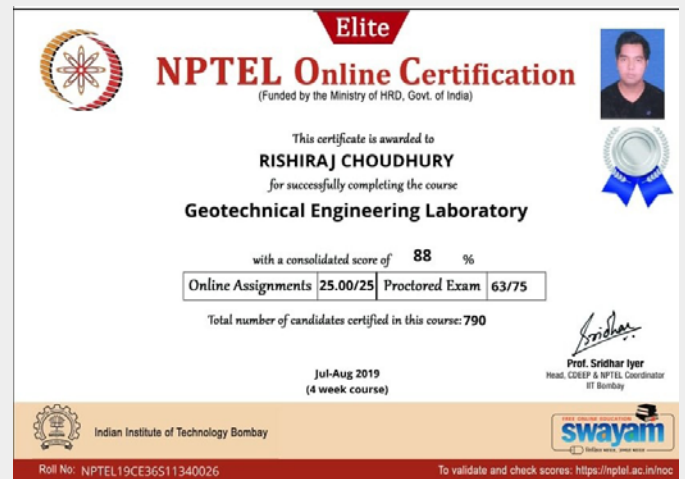
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Miscellaneous News

NPTEL Courses

Total 45 nos. of students from the department have appeared for NPTEL certificated courses for the session July-Aug, 2019, out of which 40 nos. were successful. The subjects taken by the students are- Concrete Technology, Fluid Mechanics, Geotechnical Engineering Laboratory, GPS Surveying, Matrix Method of Structural Analysis, Principles of Construction Management and Remote Sensing and GIS. Dr. Malaya Chetia has received mentorship certificate as well for mentoring the 64 students enrolled for the subject of Geotechnical Engineering Laboratory throughout the session.

Apart from the students, 2 faculty members of the department have also obtained NPTEL certificates (equivalent to Faculty Development Courses). They are- Dr. Sasanka Borah (Geotechnical Engineering Laboratory, Sustainable Materials and Green Buildings, Integrated Waste Management for a Smart City) and Dr. Malaya Chetia (Geotechnical Engineering Laboratory, Stress Management, Environmental Geotechnics).



Overseas Internship

Three students of the civil engineering department viz. Rimjim Borah, Dixita Bora and Sukanya Bora have been selected for the overseas internship programme, 2020, sponsored by the Directorate of Technical Education, Assam. They are currently in final year of B.E. program. The name of the institute is Heriot-Watt University and is located in Edinburgh, Scotland, U.K. They will be attending

a lecture series on “Understanding the impacts of El Nino events on the Indian agricultural productivity” from 10th February, 2020 to 24th March, 2020. They will be conducting a pilot study with focus on the Vaigai river basin located in the drought-stricken region of Southern India to understand the implications of historic ENSO events in weakening of Indian monsoon rainfall and on the water food nexus in the country, a phenomenon that could be intensified during ENSO.

MoU with ASDMA

Memorandum of Understanding between Civil Engineering Department of Assam Engineering College and Assam State Disaster Management Authority (ASDMA), Assam, India, for the advancement of academic, research and educational exchanges between AEC and ASDMA. The two institutions agreed to formalize a MoU in setting up of ‘Centre of Excellence for Capacity Building on Earthquake Resistance Construction Technology’

Placement Statistics

A total of 17 nos. of students were placed in campus recruitments drives for the batch 2015-19. The recruiting organisations were- Numaligarh Refinery Ltd., Bitchem, Black Tiger Cement, Luit Minerals, Earth to Sky Infrastructures and Infosys (IT).

Digital Classrooms

Under the scheme of “Readiness of Institute for establishment of Digital Classrooms under TEQIP-III” 3 nos. of “Samsung Flip 2” LED IR touch interactive digital boards have been installed in of Room no. 1, 2 and 20 of the department. This will enhance the teaching learning experiences of the students in the coming days.



GATE and Employability Coaching

GATE coaching has been provided to the final year students by “The GATE Academy” during September, 2019 to January, 2020 under the programme of TEQIP-III. 53 nos. of final year students underwent the training programme of 350+ hours in the department every day after their normal classes.

Employability coaching has also been provided to all the 3rd and 4th year students of the department by “Ethnus Group” for 15 days during the month of August under the programme of TEQIP-III. They were trained on soft-skills rigorously during those 15 days which included mock group discussion, mock personal interviews, aptitude classes etc.

Campus Recruitment Training Programme

Department of Civil Engineering arranged a “Campus Recruitment Training Program” in collaboration with T.I.M.E. Pvt. Ltd. and Training & Placement Cell of Assam Engineering College during the month of February-May, 2019 for the B.E. 6th semester students. The duration of the course was 44 hours and classes held from 1:00 pm to 3:00 pm on every Monday and Tuesday. The fees for the course was borne by T&P cell, hence it was free for the students enrolled. This benefitted the 96 students enrolled for providing test preparation to the students in the field of MAT, CAT, GRE, GMAT, GATE (aptitude part), Campus Recruitment Screening Test and Govt. jobs like Bank PO etc.

Lecture Series on Remote Sensing and GIS

A lecture series on Remote Sensing and GIS was arranged under TEQIP-III program for the benefit of the students of B.E. 7th semester (having elective subject of Remote Sensing) and M.Tech 1st semester (Water Resources Engineering) in the month of October- November 2019. Mr. Jeffrey Denzil K. Marak from IIT Guwahati and Ms. Dipima Sarma, Research Associate - III, Climate Change Cell, Department of Environment & Forest, Govt. of Assam, were the two resource persons for the lecture series. A total number of three lectures, each of four hours duration, was arranged in the seminar hall of the civil engineering department. The major topics that were covered were- the basics of RS & GIS and hands-on training on ArcGIS and Q-GIS. Students were immensely benefited from the lectures series as was evident from their feedback.



SWARM 2020

An International Conference on Sustainable Water Resources Management (SWARM 2020) is to be organized by the Department of Civil Engineering, Assam Engineering College in association with the Department of Civil Engineering, Indian Institute of Technology Guwahati from 19th to 21st June, 2020. This conference, hence, is being organized to provide a platform for discussion among various relevant disciplines so that some meaningful, practical strategies can be evolved towards achieving the goal for sustainable management of water resources of the globe.

For registration go to: <http://event.iitg.ac.in/swarm/swarm2020.htm>

Submission of Full-Length Paper: **1st March, 2020**

Notification of Acceptance of Paper: **31st March, 2020**

Early Bird Registration Deadline: **15th April, 2020**

Last date of Registration: **15th May, 2020**

Camera-ready Full-paper Submission: **15th April, 2020**

Link for paper submission: <https://easychair.org/conferences/?conf=swarm2020>

International Conference on Sustainable Water Resources Management SWARM 2020
19-21 June 2020

ORGANIZED BY ASSAM ENGINEERING COLLEGE & IIT GUWAHATI

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REGISTRATION DETAILS
<http://event.iitg.ac.in/swarm/swarm2020.htm>

KEY DATES

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CALL FOR PAPERS (For details click: <https://easychair.org/conferences/?conf=swarm2020>)

This conference will accept submissions relevant to the following topics:

- Water Management and Planning
- Water Quality and Pollution Control
- Water Resource Management
- Management of Transboundary Rivers
- Climate Change and Water Scarcity
- Hydrological Modelling
- Management of Groundwater and Aquifer Recharge
- Irrigation and Drainage Engineering
- Water Conservation
- Water Resource Risk Management

OVERVIEW

The rapid growth of the population on the world's surface is forcing industrialization and urbanization. In developing countries, the process of globalization is more rapid, unregulated and uncontrolled, resulting in various hazards due to unbridled industrialization and urbanization. In some, there has also been a conversion of large areas of agricultural/urban area, filling up of low-lying areas to meet the resource need to support the increased population. Unprecedented natural calamities like devastating flood, droughts, erosion, surface mining, landslides can be regarded as manifestations of nature's actions to restore the balance. The increased emission of greenhouse gases due to industrialization and the continuation of unsustainable agricultural practice in many parts of the world have led to climate change. Accelerated change in climate is expected to have a major impact on the high vulnerability of the earth. On the other hand, the increase in population has reduced 100 per capita availability of water which resulted in unbridled exploitation of both surface water and groundwater. Due to overexploitation, groundwater has been depleted in many parts of the world. As a result, it becomes unsustainable to continue groundwater from aquifers. The over-exploitation of groundwater may also result in the depletion.

This conference, hence, is being organized to provide a platform for discussion among various relevant disciplines on the most meaningful, practical strategies can be evolved towards achieving the goal for sustainable management of water resources of the globe.

OBJECTIVES

- To identify the specific issues that need to be tackled for sustainable management of water. The challenges related to modeling and management of various aspects of water will be identified, and a goal will be set to resolve the issue within a specific time frame.
- To discuss the impact, resilience, and risks arising from the hazard created by the various programmes, flood including urban flooding, river and catchment systems, the water quality of both surface water and groundwater, waterlogging and drought, landslides, erosion, etc.
- To provide a platform for the academic, professional, and industrial community to share the latest findings in their respective fields as well as to share the discussion about the difficulties faced by them in solving various water-related problems. The interaction between the academic and the practicing engineers will help in reducing the knowledge gap between the theoretical advances and practical applications, and help in understanding the problems faced by the industry. This conference will also provide a platform to exchange knowledge between the national and international researchers, which will enhance both the academic and professional collaboration between the researchers.
- To foster participation and dialogue between various stakeholders, including governments, scientists, and academic communities, in order to promote sustainable policies for water management, create awareness of water-related problems, motivate commitment of the public for their solution and thus promote better management of water resources at local, regional, national and international levels.

TARGET DELEGATES:

- Scientists and researchers
- Academics/lecturers
- Public and private sectors
- Policy makers and scientific advisors

Conference Venue: Assam Engineering College
Email: swarm@iitg.ac.in, convenor@gmail.com, Contact: 0361-2532428

Messages from recent alumni abroad

Hello dear students! I hope you all are doing well. Most of you know that I have come to Japan to pursue Ph.D. The life here as an international student is an exciting and enriching experience. I feel that you too have the potential to enroll in a reputed institution of higher education or crack a competitive examination. For that, you should be clear about your goal from initial phase of bachelors degree and start preparing accordingly rather than taking year drop right after graduation (gap between study period is questioned everywhere). In the meantime, don't turn a blind eye to your academic performance.

Finally, I want to tell the students from Assamese medium background that I can understand that some of you face difficulties during the transition to English medium of instruction (I also studied in Assamese medium school). Embrace this challenge and excel in life!

Rupali Sarmah

Ph.D student, Hokkaido University, Japan
AEC batch of 2007-11 (B.E.)



Hello AECIANS! I am a proud AECIAN currently living in Kyoto, Japan. I got the Japanese government MEXT scholarship to pursue my doctoral studies at Kyoto University after completing my masters from IIT Delhi. As I have experience only in the research area, I would like to share some tips with my juniors who are interested in research. Please try to focus on which research topic you are interested in and try to read many journal papers related to that topic. Always think about publishing your research work. You can also publish papers from your final year project works. Last but not least, try to get a decent score in exams. If you follow all these, I am sure you will get admission in a foreign university with scholarship, where you can get state of the art facilities to continue your research for the betterment of the world and can share your thinking with the people all over the world.

Purbashree Sarmah

Ph.D student, Kyoto University, Japan
AEC batch of 2008-12 (B.E.)



Hello! This is your fellow AECian from the other side of the world, New Jersey, USA. It's been almost 4 years since I graduated from AEC (oh how time flies) and here's what I have been doing since then. When all my friends were preparing for GATE in the 7th semester of AEC, I focused more on the GRE and TOEFL examinations. In came the results and I started applying for the best graduate colleges in the world. Maybe it was the tag of the prestigious AEC, my random extra-curricular activities in college or the amazing letters of recommendation written by my professors, I was admitted to the University of Illinois – Urbana Champaign for masters in Structural Engineering. With extreme excitement and a heavy heart, I packed my bags, said my goodbyes and went off into the unknown. And here I am, after completing my masters, working in a structural engineering company doing what I enjoy, in the place of my dreams (NYC is right around the corner and it's awesome!)

It wasn't easy. None of it was. But you can't expect to get what you want by doing the easy. Every day, there were two choices in front of me – the Easy or the Right. And what I chose every single day has brought me where I am today. Your Right may be different from mine depending on what you want in life and that is okay. So, which one will you choose today?

Ankita Goswami

Structural Engineer at MPP Engineers
New Jersey, USA
AEC batch of 2012-16 (B.E.)



Studying Abroad is definitely an experience which everyone should go for at least once in their lifetime. All you need is a good GPA, required test scores such as GRE, TOEFL etc., a statement of purpose which is fundamentally an essay that introduces you to the reader and talks about your goals and aspirations based on your activities in your undergraduate study and then letters of reference from mentors in academia or industry who could vouch for you. Once you have these documents submitted, sit back, be patient and wait for that beautiful offer letter! Once you are in the US you can apply for assistantships that will pay you and cover all your expenses while studying! Several internships, conferences, seminars, career fairs and competitions happen all year round for your benefit in study and career! If you have plans on going abroad it's a definite Go!

Kewal Agarwalla

M.S. in Civil Engineering, Virginia Tech
AEC batch of 2012-16 (B.E.)



“AEC”. Honestly, I don't know how I should describe you. But deep inside, my heart says that the word “DAWN” will be a proper word for you. Because holding your hand, I made my journey from dark to light of hope. Someone has rightly said the highest level of darkness prevails before the dawn. Yes, I can relate to this. Experiencing a devastating accident before entering to AEC, you were like scaffolding to me whenever I tried to explore something new. From the academic to cultural performances, you helped me in boosting my confidence. Sitting in the classroom of the civil engineering department, I fell in love with structural engineering and decided to make my professional career in structural engineering. The superb teaching skills of Jayanta Pathak sir and Diganta Goswami sir added fuel to my aspiration. Today, when I look back on my life in AEC, I realise three things. Firstly, in your life, if you are failing to plan; then definitely you are planning to fail. Secondly, to be successful, you needn't know everything but at least you should be aware of what you don't know. Finally, and most importantly, just because you love or like something, it is not necessary that you should get it. The sooner you realize it, better it will be.

Mrinal Jyoti Mahanta

Ph.D student
North Carolina State University
AEC batch of 2012-16 (B.E.)



Snapshots from the year 2019



Publications

Journal

- Barman, M. and **Goswami, P.** (2019). "Impact of Climate Change on Characteristics of Rainfall and Temperature in Kamrup District of Assam" IARJSET, Volume-6, Issue-10
- **Bhardwaj, B.B.** and Goswami, S. (2019). "Road asset management system in developing countries-implementation and challenges", International Journal of Civil Engineering and Technology, 10 (2), 1227-1232 (IF: 9.782, ISSN-0976-6308/16)
- **Goswami, P.** and Brahma, H. (2019). "River Water Level Prediction Modelling using Artificial Neural Network and Multiple Linear Regression", IJEMR, Volume-9, Issue-6.
- Hussain, H., **Sharma, B.** and Rahman, T. (2019). "Micropile group behaviour subjected to lateral loading", International Journal of Innovative Infrastructure Solutions, Springer, 4:22 <https://doi.org/10.1007/s41062-019-0206-3>
- **Pathak, J.** (2019). "Seismic Vulnerability Assessment of Earthquake-Prone Mega-City Shillong, India Using Geophysical Mapping and Remote Sensing", Journal Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards, Taylor & Francis DOI: 10.1080/17499518.2019.1598560 ISSN: 1749-9518 (Print) 1749-9526 (Online).
- Rahman, J. and **Sarma, B.** (2019). "Assessment of Crop Water Requirement and Irrigation Scheduling of Dhanshiri Basin", Journal of Emerging Technologies and Innovative Research (ISSN: 2349-5162), Volume 6, Issue 1.
- Rahman, J. and **Sarma, B.** (2019). "Optimal Cropping Pattern for Dhanshiri Basin for Food Sustainability", International Journal of Engineering and Applied Sciences (IJEAS) ISSN: 2394-3661, 6 (9).
- **Sharma, B.** and Hussain, H. (2019). "Behaviour of Micropiles Groups Subjected to Vertical Loads", Accepted for publication in International Journal of Innovative Infrastructure Solutions, Springer.

Conference

- Das, D., Kalita, T. and **Chetia, M.** (2020). Influence of strain rate on unconfined compressive strength of bentonite and sand mixes. Accepted as a book chapter to be published in Springer Volume "Geotechnical Characterization and Modelling", Indian Geotechnical Society.
- Das, H., Kalita, T. and **Chetia, M.** (2020). Compaction and strength characteristics of bentonite-rock quarry dust mixtures. Symposium of the International Association for Computer Methods and Advances in Geomechanics, IIT Gandhinagar, India.
- **Gohain, S. and Talukdar, B.** (2019). "Causes and Ecological Impact of Embankment Breach in Dhemaji District of Assam, India", Accepted in International Conference on Status and Future of the World's Large Rivers, August 3-7, 2020, Moscow, Russia.
- Kakati, N. and **Chetia, M.** (2020). Shear strength of rock quarry dust and sand mix. In: Babu K., Rao H., Amarnath Y. (eds) Emerging Trends in Civil Engineering. Lecture Notes in Civil Engineering, Vol. 61, Springer, Singapore.
- **Pathak, J.** (2019). Earthquake Damage and Loss Model for the City of Guwahati, Assam, India" - SECED Conference on Earthquake and Civil Engineering, University of Greenwich, Greenwich, London.
- **Pathak, J.** (2019). Flood and Erosion Induced Displacements: Deployment of Flood Resilient Housing in Assam" - COSVARD 2019 - 2nd International Conference on Smart Villages and Rural Development, Guwahati.
- **Pathak, J.** (2019). Towards Real-Time Earthquake Loss Information System for Guwahati City, Assam, India"- accepted, 17th World Conference on Earthquake Engineering (17WCEE) September 14-18, 2020, Sendai, Japan, under the auspices of International Association for Earthquake Engineering.



- Siddique, F., Acharjee, A. and **Sharma, B.** (2019). "A Study on Characteristics of Soil Profile of Guwahati City against Different Ground Motions: 1D Non-linear Ground Response Analysis", Accepted for publication in 7ICRAGEE, Bangalore.
- **Talukdar, B.**, Arun, G. and Gogoi, A. (2019). "Assessment of Stable Morphology of Brahmaputra River", Accepted in International Conference on Status and Future of the World's Large Rivers, August 3-7, 2020, Moscow, Russia.

Faculty Activities

Dr. Binu Sharma

- Invited as Speaker in the 2019 International Conference on Advances in Civil and Ecological Engineering Research (ACEER 2019), held at I-Shou University, Kaohsiung, Taiwan from July 1st to 4th, 2019.
- Delivered talks as resource person in a short course on Geotechnical Aspects of Earthquake Engineering (Sponsored by TEQIP-III) organized by the Discipline of Civil Engineering, Indian Institute of Technology Indore, during 26th and 28th December 2019.

Dr. Jayanta Pathak

- Received a sponsored project on "Installation and Operation of a Local Seismic Network in The City of Guwahati" - sanctioned by Assam State Disaster Management Authority.
- Received a sponsored project on "Compendium of Traditional Earthquake Resilient Construction for Knowledge Sharing and Disaster Risk Reduction: Promotion of Traditional Construction Practices" - sanctioned by National Disaster Management Authority (NDMA), Govt. of India, jointly with IIT Ropar, IIT Roorkee.
- Delivered lecture on "Earthquake Risk Management" - Refresher Course on Disaster Management, Gauhati University, 26 August 2019.
- Delivered lecture on "Disaster Risk Management for Sustainable Development" - Workshop on IDDR 14 October 2019, Krishna Kanta Handiqui State Open University, Guwahati.
- Delivered lecture on "Urban Risk Reduction for Sustainable & Smart City development" Workshop

on Smart and Sustainable Cities, 11-12 October, 2019, Tata Institute of Social Sciences, Guwahati Campus.

- Delivered lecture on Quantification of Seismic Hazard and Mitigation of Induced Effects in NER 8-9 November 2019 Conducted by: Department of Civil Engineering Organized by: Knowledge Incubation for TEQIP Centre for Educational Technology
Delivered Course on Earthquake Risk Management at PSG College of Technology Coimbatore, under TEQIP III Sponsored Faculty Development Programme on "Disaster Risk Management".

Dr. Diganta Goswami

- Supervised scholar Arunav Chakraborty for his Ph.D works with the topic "Three Dimensional Slope Stability Analysis of Landslides in Guwahati and Adjoining Areas - Causative and Remedial Measures"
- Delivered a lecture in the brainstorming session cum workshop on "Quantification of Seismic Hazard and Mitigation of Induced Effects in NER", organized by IIT Guwahati, 8-9 November, 2019. Topic of Lecture: "Geotechnical Testing - Dam Foundations in Arunachal Pradesh"
- Delivered keynote lecture for TEQIP-III sponsored Faculty Development Programme on "Disaster Risk Management", organized by PSG College of Technology, Peelamedu, Coimbatore, 11-12 November, 2019. Topic of Lecture 1: "Landslide Hazard and Flash Flood in Fast Developing Cities". Lecture 2: "Evaluation of Liquefaction Potential"
- Delivered a lecture at National Seminar on "Rain water Harvesting, its Purification and Ground Water Recharge" organized by DownTown University, 22-23rd November, 2019. Topic of Lecture: "Flash Flood and Depletion of Ground Water in Guwahati"
- Delivered a lecture at an awareness programme at the office of the Director of Soil Conservation, Govt. of Assam on 9th January, 2020. Topic of the lecture: "Mitigation flash flood and erosion aspect"

Dr. Bipul Talukdar

- Coordinator for the Faculty Development Programme on "Recent Advances in Concrete Technology", 15-19 July, 2019 at Civil Engineering Department, Assam Engineering College.

- Lead Speaker in the workshop on “Advancement in Water Modelling Tools”, at Civil Engineering Department, IIT Guwahati, 15th May 2019.
- Delivered key note lecture at TEQIP III sponsored FDP on “Disaster Risk Management”, at PSG College of Technology, Coimbatore, 11-16 October, 2019.
- Delivered key note lecture at National Seminar on “Rain Water Harvesting, its Purification and Ground Water Recharge”, organised by Assam Down Town University on 22-23 November, 2019.
- Resource person for Concrete Technology at “Special Training on Structural Design of Piped Water Supply Scheme for Graduate Engineers of PHED, Assam.”, 25-30 November, 2019.
- “Overview of Hydrology and Water Resources in India – Surface and Ground Water”, Expert lecture presented at Certificate Course on “Remote Sensing and GIS Application in Water Resources”, organised by North East Space Application Centre (NESAC), Barapani on 27th November, 2019.
- Resource person for “Water Footprint Assessment – A step towards Integrated Water Resources Management”. Expert lecture delivered at Workshop on Advances in Integrated Water Resources Management, Civil Engineering Department, IIT Guwahati, December 16-18, 2019.

Dr. Bibhash Sarma

- Delivered invited lecture in the seminar on “Soil Erosion in North Eastern Region” organised by Brahmaputra Board, Ministry of Water Resources,



River Development and Ganga Rejuvenation, 14th February 2019.

- Acted as Resource Person in the training course on “Flood Disaster Mitigation and management”, sponsored by DoPT, Govt of India, Assam Administrative Staff College, 4-6 September, 2019.
- Participated as invited expert in six TV news channel talk shows on topics related to dam safety, flood and erosion.
- Successfully completed four FDP at NIT Agartala and Assam Engineering College.

Dr. Triptimoni Borah

- Received a grant of Rs. 3,00,000/- under the Collaborative Research Scheme of ASTU under TEQIP-III program as Principal Investigator for the project titled “An experimental study on noise pollution in the campus of Assam Engineering College”.
- Received a grant of Rs. 3,00,000/- under the Collaborative Research Scheme of ASTU under TEQIP-III program as Principal Investigator for the project titled “A study on the impact of water pollution due to dumping of waste in DeeporBeel”.

Dr. Malaya Chetia

- Received a collaborative research project entitled “Performance improvement of clay using fly ash and rock quarry dust” jointly with Dr. Lalit Borana under TEQIP-III of IIT Indore.
- Became a topper and received (Elite + Gold) certificate out of 790 certified candidates in NPTEL online certification course “Geotechnical Engineering Laboratory”, Jul-Dec 2019.
- Received the top performing mentor certificate of appreciation in recognition as mentor for the NPTEL online certification course “Geotechnical Engineering Laboratory”, Jul-Dec 2019.





Dr. Sasanka Borah

- Received a grant of Rs. 14,50,000/- by AICTE under the Collaborative Research Scheme of MHRD, Govt. of India (TEQIP-III) the Research Promotion Scheme for the North East Region (RPS-NER) as Principal Investigator for the project titled “Utilization of lime-mud as soil stabilizer”.

Mr. Bibhuti B. Bhardwaj

- Resource Person at Rural Connectivity Training and Research Centre (RCTRC), Guwahati, funded by Assam Road Research & Training Institute (ARR&TI) and delivered lectures on “Planning, Execution and Maintenance of PMGSY roads World bank and ADB states”, 25th February, 2019
- Received a grant of Rs. 19,75,000/- by AICTE under the Collaborative Research Scheme of MHRD, Govt. of India (TEQIP-III) as Principal Investigator for the project titled “Methodology for prioritization of secondary road network sections for planning and maintenance works”.

Dr. Anindita Bhattacharya

- Awarded Ph.D degree for the research work “Sedimentological and Early Palaeogene Benthic Foraminiferal Biostratigraphic study of Syllhet Limestone Formation of Khasi Hills, Meghalaya” under the guidance of Dr. Bikash Gogoi, Associate Professor, Department of Geological Sciences, Gauhati University in June, 2019

Student Achievements

Annanya Kataki, B.Tech 4th Semester

- Titled “Miss Venus” in the personality contest Mars And Venus held in Assam Engineering College, Pyrokinesis 2019
- Secured 2nd best actress in college week of Assam Engineering College, 2019
- Invited as a Moderator in Don Bosco Guwahati MUN, 2019
- Invited as a trainer for a two-day workshop on delegation skill development in Don Bosco Guwahati, 2019
- Invited as a Chairperson in Corporate International Conclave MUN, 2019
- Invited as a Chairperson in Delhi Public School Guwahati MUN, 2019
- Invited as an Associate Advisor to the Executive Board in Corporate International Conclave MUN, 2020

Anusko Awesh, B.Tech 4th Semester

- Got a special mention in IIT-G MUN edition X

Abhishek Roy, B.Tech 4th Semester

- Secured Second Position in the Group Dance Competition in College week, 2019

Kaushik Medhi, B.Tech 4th Semester

- Chosen as Delegate of MUN Conferences in IIT Guwahati MUN (Alcheringa) and JECMUN (Techfest)
- Working as an Intern with The Northeastern Chronicle
- Successfully organised Flood Relief Camp for the Assam Flood, 2019
- Successfully organised different events under different clubs like ACA AEC, SOVIC, EDC AEC, etc

Keshmita Baishya, B.Tech 4th Semester

- Received the Girl’s Special Merit Scholarship Award (awarded to the top 100 girls of engineering colleges) from the education minister of Assam, Siddhartha Bhattacharya
- Participated in Mars and Venus and received a Certificate of Appreciation in Pyrokinesis, 2019
- Secured Second Position in the Qawali singing Competition in College week, 2019
- Secured Second Position in Zikir singing Competition in College week, 2019
- Secured Third Position in Flower Decoration Competition in College week, 2019
- Hosted the musical event of college, Euphoria, 2019

Salim Raja, B.Tech 4th Semester

- Secured 5th position under the open category in the 4th Republic Day Open Chess Tournament-2019, 26th-27th January 2019
- Runners-up in Chess Competition in the College Week of AEC Secured 1st position in the GU Inter College Chess Championship, 6th February 2019
- Best Player of AEC under the male category in Shatranj 2.0 (Rapid), Pyrokinesis 2019
- Runners up under the team category of Chess in Spirit, 2019
- Secured 2nd position in the best player of AEC under the open category in the All India Open Rating Chess Championship



- Organised a Chess Tournament for forming the B-Team of AEC with the Core team members as a part of the Chess Club activity at the Induction Programme

Yugol Kishore Barman, B.Tech 4th Semester

- Participated in North East Region Inter College Tournament (NERICT) organised by Assam Don Bosco University. The team qualified to the Quarterfinals
- Participated and represented ASTU in the All India University Basketball Tournament (AIU) East Zone, held at MGKV, Varanasi. His team managed to reach the Pre-Quarter Finals and were among the top 15 teams of the East Zone.

Dhritiraj Misra, B.E. 6th Semester

- Secured 4th position in General Quiz and 3rd position in Comic Quiz in Alcheringa Quiz, 2019
- Organised Grey Matters in Pyrokinesis, 2019
- Participated in Tata Crucible, 2019
- Participated in SBI NumeroYono Quiz, 2019
- Winner of Quiz Time organised by DD News
- Participated in Cotton College Independence Day Quiz, 2019
- Participated in Indiky Regional Round, 2019
- Participated in Cop Quest, 2019
- Secured 4th position in 21st OIL Inter-institution Quiz, 2019
- Participated in Mercemoc, 2019
- Secured 3rd position in Brainoholic Quiz, 2019

Harsita Kalita, B.E. 6th Semester

- Secured First Position in the event Pulp Fiction of TECHXOM 2019, under the aegis of ISTE, 9th of February, 2019
- Secured Second Prize in Sci-Fi writing Competition under INSCIGNIS-2019 organised by Tezpur University, 2019
- Secured Second Prize in Story Combat 2.0 organised by AEC Literary Society, 2019

Murchana Choudhury, B.E. 6th Semester

- Best player of AEC under the girls' category in Shatranj 2.0 of Pyrokinesis, 2019

Rimpi Sharma, B.E. 6th Semester

- Secured 1st position in Bihu Competition in the College Week of AEC, 2019
- Secured 3rd position in Poem Competition under the English Category in the College Week of AEC, 2019

- Secured 3rd position in Essay Competition under the English Category in the College Week of AEC, 2019
- A member of the organising team of the Build-Xtra event of Udbhavanam 7.0, 2019
- A member of the Content Writing team of Pyrokinesis, 2019

Rituraj Borgohain, B.E 6th Semester

- Secured Second Runners-Up in the 4th Republic Day Open Chess Tournament, 2019 organised by Brahmaputra Chess Academy on 26th-27th January 2019
- Received the Championship title in the Gauhati University Inter College Chess Tournament, 2019 organised by Guwahati College, Bamunimaidan, 6th-7th February
- Received Runners-Up title along with the AEC Chess club team in the Spirit, 2019 organised by IIT Guwahati, 26th-29th September 2019
- Received the Certificate of Appreciation and Memento for organising the All India Open Rapid Rating Chess Championship, 2019 held at Assam Engineering College, Jalukbari, 13th October 2019
- Represented AEC in the East Zone Inter-University Men team Chess Championship, 2019, organised by Centurion University, Odisha under the banner of All India University, 29th Oct-1st November 2019
- Secured 3rd position in the Best below Elo 1700 in the Category-B of the 18th Delhi International Open Grandmasters Chess Tournament 2020, organised by Delhi Chess Association from 9-12 January 2020

Nafisa Nazneen Choudhury, B.E. 8th Semester

- Received Elite Certification in Geotechnical Engineering-I by IIT Kharagpur, NPTEL
- Published Research Article named "Impact of Lightning in North-East" on Make Me Builder, OPC Pvt Ltd Website
- Received certification in Business Analyst and English Comprehension by Aspiring Minds, AMCAT based on AMCAT score
- Received Certification by Aspiring Minds, AMCAT for completing skill assessment in Civil Engineering, Construction Engineering and in Civil Construction.
- Became Student Member in Institution of Civil Engineers (ICE)
- Became a Certified Member in the National Society of Professional Engineers (NSPE).



UG Programme

Vision

To have complete synergy between teaching and learning for producing civil engineers, who are competent and socially responsible to contribute to the sustainable development of the state, the region and the nation, with global perspective

Mission

1. To provide state-of-the-art teaching and learning environment where students can solve problems related to civil engineering.
2. To generate excellent human resource in civil engineering through integration of research, innovation and sustainable technology in the learning domains of under-graduate and post-graduate education.
3. To make students capable of designing sustainable solutions for engineering challenges.
4. To develop researchers and regional leaders in the field of civil engineering by serving as a knowledge hub for the society through continuing education, professional program and innovative consultation.

Staff List

Scientific Assistants

- Mr. Niren Chandra Baishya
- Mr. Tafik Ali Dewan
- Mrs. Nimita Devi
- Mr. Jogesh Das

Junior Instructors

- Mr. Paban Bhattacharyya
- Mr. Ambika Charan Bordoloi

Draftsman

- Mr. Manoj Kumar Dutta,

Computer Operator

- Mr. Pankaj Kumar Das

Projector-band Epidoscopic Operator

- Mr. Nalini Deka

Plumber

- Mr. Subal Chandra Kalita

Lab Assistants

- Mr. Laghanu Rabha
- Mr. Prasanta Kumar Das
- Md. Ali Ahmed
- Mr. Samar Jyoti Sarma

Multi-tasking Staff

- Mr. Son Deka

Faculty List

Professors

- Dr. Palash Jyoti Hazarika (HoD)
- Dr. Binu Sharma
- Dr. Jayanta Pathak
- Dr. Mrinal Kumar Borah

Associate Professors

- Dr. Diganta Goswami
- Dr. Bipul Talukdar
- Dr. Bibhash Sarma
- Dr. Utpal Kumar Misra
- Mr. Bhaskarjyoti Das
- Dr. Triptimoni Borah
- Dr. Utpal Kumar Nath

Assistant Professors

- Dr. Malaya Chetia
- Dr. Pankaj Goswami
- Dr. Bharati Medhi Das
- Mrs. Puspanjali Sonowal
- Mrs. Rupjyoti Bordoloi
- Mr. Abinash Mahanta
- Dr. Sasanka Borah

Assistant Professors (TEQIP-III)

- Mr. Bibhuti B. Bhardwaj
- Ms. Jayshree Hazarika

Guest Faculty

- Dr. Indira Baruah Gogoi
- Mr. Prasenjit Saha
- Ms. Mitali Mandal
- Mrs. Rhitwika Barman
- Dr. Anindita Bhattacharya



Contact Us

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