on

UNDERSTANDING MATLAB

(5th to 12th August, 2022) (36-Hour Course)

organized by

HRDC

Institute of Engineering & Management, Saltlake University of Engineering & Management, Kolkata

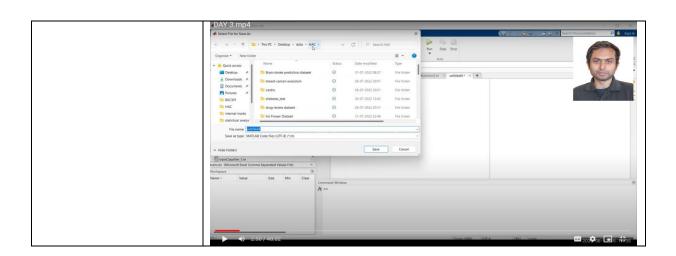
(Online Zoom Platform)







Name of the activity	5 Days FDP on Understanding MATLAB		
Name of the Program	Prof. (Dr.) Mohuya Chakraborty, Dean HRDC & Principal		
Coordinator	(Ashram Campus), Institute of Engineering & Management-		
Coordinator	Kolkata.		
Name of the	Faculty members of ECE, IT, CSE and CSE allied branches		
participant	raculty members of ECE, 11, CSE and CSE affect branches		
Resource Persons	Day 1 (August 5, 2022): Prof. (Dr.) Prithwineel Paul, Associate		
	Professor, Computer Science & Engineering, IEM, Saltlake		
	Day 2 (August 8, 2022): Prof. (Dr.) Prithwineel Paul, Associate Professor, Computer Science & Engineering, IEM, Saltlake		
	Day 3 (August 10, 2022): Prof. (Dr.) Prithwineel Paul, Associate Professor, Computer Science & Engineering, IEM, Saltlake		
	Day 4 (August 11, 2022): Prof. (Dr.) Susovan Jana, Assistant Professor, Computer Science & Engineering (Internet of Things), IEM, Saltlake		
	Day 5 (August 12, 2022): Prof. (Dr.) Susovan Jana, Assistant Professor, Computer Science & Engineering (Internet of Things), IEM, Saltlake		
Organizing	HRDC		
Unit/Agency,			
Collaborating Agency			
Name of the Venue	Virtual Online Zoom Platform		
Date of the Event	August 5, 8, 10, 11 & 12, 2022		
	The objective of this program was to discuss about the use of		
Short description of	MATLAB in different research domains. The speakers delivered		
the event	the talk mainly on the use of MATLAB in Machine Learning and		
	Image Processing. Next, they demonstrated the efficacy of		
	MATLAB by hands on session.		
	·		
Images of the event	MATLAB'		
	Image Acquisition Using Sensor Strips		
	One image line out por increment of linear motion		
	Imaged area		
	Linear motion Cross sectional images of 3-D object Resonance Imaging		
	PET-Positron		
	3.D object Emission Tomography		
	Jana Santa		
	a b		
	FIGURE 2.14 (a) Image acquisition using a linear sensor strip. (b) Image acquisition using a circular sensor strip.		
	3:51 / S2:15 Dr. Susovan Jana, Department of Intermation Technology, IEM, Kolkata, IN 2022		



Head (HRDC)
Instituted of Engineering & Management
Salt Lake, Electronics Complex
Kolkata-700091

on

AUGMENTED REALITY & VIRTUAL REALITY

(19th to 23rd September, 2022) (36-Hour Course)

organized by

HRDC

Institute of Engineering & Management, Saltlake University of Engineering & Management, Kolkata

in

Collaboration with

IEMA Research & Development Pvt. Ltd.

(Venue: IEMA Research & Development Pvt. Ltd.)







Name of the activity	5 Days FDP on Augmented Reality & Virtual Reality			
Name of the Program Coordinator	Prof. (Dr.) Mohuya Chakraborty, Dean HRDC & Principal (Ashram Campus), Institute of Engineering & Management-Kolkata.			
Name of the participant	Faculty members of ECE, IT, CSE and CSE allied branches			
Resource Persons	Day 1 (September 19, 2022): Mr. Snehan Biswas, IEMA Research & Development Pvt. Ltd.			
	Day 2 (September 20, 2022): Mr. Rishit Chakraborty, IEMA Research & Development Pvt. Ltd.			
	Day 3 (September 21, 2022): Ms. Sudipa Dutta, IEMA Research & Development Pvt. Ltd.			
	Day 4 (September 22, 2022): Mr. Snehan Biswas, IEMA Research & Development Pvt. Ltd.			
	Day 5 (September 23, 2022): Mr. Rishit Chakraborty, IEMA Research & Development Pvt. Ltd.			
Organizing Unit/Agency, Collaborating Agency	HRDC in collaboration with IEMA Research & Development Pvt. Ltd.			
Name of the Venue	IEMA Research & Development Pvt. Ltd.			
Date of the Event	September 19-23, 2022			
Short description	This program aimed to train high-potential faculty members in the domain of Augmented Reality (AR) and Virtual Reality (VR). This			
of the event	FDP targeted the following fields: Connection between machine learning, deep learning and data science, introduction to AR-VR with industry level applications, Drone automation and image processing applications in respect to industry application. The speakers conducted hands on sessions also.			

Images of the event

Head (HRDC)
Instituted of Engineering & Management
Salt Lake, Electronics Complex
Kolkata-700091

on

CASE WRITING

(3rd to 13th May, 2023) (36-Hour Course)

Organized by

Case & Research Wing in Association With HRDC

Institute of Engineering & Management, Saltlake University of Engineering & Management, Kolkata

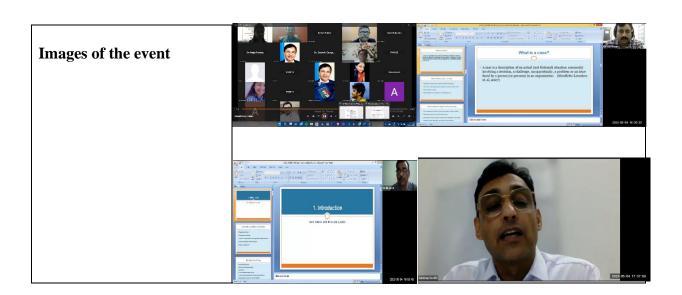
(Online Zoom Platform)







Name of the activity	5 Days FDP on Case Writing	
Name of the Convener	Prof. (Dr.) Mohuya Chakraborty, Dean HRDC & Principal (Ashram Campus), Institute of Engineering & Management-Kolkata.	
Name of the Program Coordinator	Prof. (Dr.) Dipak Saha, Professor, Department of Business Administration, Institute of Engineering & Management-Kolkata.	
Name of the participant	Faculty & Students of the Department	
Resource Persons	Day 1 (May 3, 2023): Prof. (Dr.) Anuja Pandy, Professor-AIMA & Head-India Case Research Centre, All India Management Association, New Delhi.	
	Day 2 (May 4, 2023): Prof. (Dr.) Sandip Anand, Professor, University of Allahabad, Prayagraj (Allahabad), Uttar Pradesh.	
	Day 3 (May 11, 2023): Dr. Kumar Satyaki Ray, Associate Dean, & Ex-Head Case Research Centre, IBS-Kolkata. Day 4 (May 12, 2023): Prof. Jitendra Kumar, Faculty, BIMTECH-Noida (AACSB accredited Institute) & Member-Centre for Management <i>Case</i> Development BIMTECH-Noida, Uttar Pradesh, India.	
	Day 5 (May 13, 2023): Prof. Ketan Gandhi, Chief Executive Officer, Prima Automation (India) Pvt. Ltd., Ahmedabad, Gujarat, India & Advisor-Universal Case Research Centre, Mumbai, India	
Organizing Unit/Agency, Collaborating Agency	Case & Research Wing, in association with HRDC	
Name of the Venue	Virtual Online Zoom Platform	
Date of the Event	May 3, 4, 11, 12 & 13, 2023	
Short description of the event	The intent of this FDP is to train high-potential faculty members to develop the case writing culture as part of management teaching pedagogy. The FDP has outlined the importance of case writing as a pedagogical approach for active learning. Participants learn the theory behind developing a good case study and the guiding principles to write case studies. By the end of the workshop, participants are expected to build a strong foundation for developing their own cases. This is thus a great opportunity to develop valuable writing skills. By inspiring faculty members to write and use their own cases, this FDP will also assist in improving their management teaching aspects. The FDP includes tips on how to write a case effectively.	



Head (HRDC)
Instituted of Engineering & Management
Salt Lake, Electronics Complex
Kolkata-700091

on

INDUSTRY 6.0

(9th to 13th October, 2023) (36-Hour Course)

organized by

HRDC

Institute of Engineering & Management, Saltlake University of Engineering & Management, Kolkata

in

Collaboration with

IEMA Research & Development Pvt. Ltd.

(Venue: IEMA Research & Development Pvt. Ltd.)







Name of the activity	5 Days FDP on Industry 6.0		
Name of the Program	Prof. (Dr.) Mohuya Chakraborty, Dean HRDC & Principal (Ashram		
Coordinator	Campus), Institute of Engineering & Management-Kolkata.		
Name of the	Faculty members of ECE, IT, CSE and CSE allied branches		
participant			
Resource Persons	Day 1 (October 09, 2023): Prof. Amartya Mukherjee, HoD, CSE(AIML) & CSBS, IEM, Saltlake and Mr. Arijit Nath, IEMA Research & Development Pvt. Ltd. Day 2 (October 10, 2023): Ms. Sudipa Dutta, IEMA Research & Development Pvt. Ltd. and Mr. Arijit Ghosh, IEMA Research & Development Pvt. Ltd. and Mr. Arijit Ghosh, IEMA Research & Development Pvt. Ltd. and Mr. Arijit Ghosh, IEMA Research & Development Pvt. Ltd. and Mr. Arijit Ghosh, IEMA Research & Development Pvt. Ltd. and Mr. Arijit Ghosh, IEMA Research & Development Pvt. Ltd.		
	Development Pvt. Ltd. and Mr. Arijit Ghosh, IEMA Research & Development Pvt. Ltd. Day 3 (October 11, 2023): Prof. Dr. Prithwineel Paul, Associate Professor, Computer Science and Engineering, IEM, Saltlake and Mr. Hrithik Lal, IEMA Research & Development Pvt. Ltd. Day 4 (October 12, 2023): Prof. Ayan Panja, Assistant Professor, CSE(AIML) & CSBS, IEM, Saltlake and Mr. Souradeep Atar, IEMA Research & Development Pvt. Ltd. Day 5 (October 13, 2023): Ms. Sudipa Dutta, IEMA Research & Development Pvt. Ltd.		
Organizing	HRDC in collaboration with IEMA Research & Development Pvt.		
Unit/Agency,	Ltd.		
Collaborating Agency			
Name of the Venue	IEMA Research & Development Pvt. Ltd.		
Date of the Event	October 09-13, 2023		
	, ,		
Short description of This program aimed to train high-potential faculty me			
the event	Industry 6.0. The speakers discussed on the six aspects: Industrial		
	IoT, Applications of AI, Essence of Blockchain Technology,		
	Robotics & Autonomous Systems, Quantum Computing and AR &		
	VR. The resource persons showed some of live projects on drone		
T 0.7	automation, AR & VR, offline language translator, etc.		
Images of the event			







One Week Online Joint Faculty Development Programme

ANDROID PROGRAMMING & APPLICATIONS
July 18 – July 23, 2022

Organized by

NIT Patna, IIT Guwahati, IIT Roorkee, MNIT Jaipur, IIITDM Jabalpur











Programme Features

- Instructor led online training sessions
- Rigorous Hand-on (practice)
- Special sessions on Emulator Android Virtual Device
- Specific industry-led sessions
- Opportunities to learn Android Application Deployment on Android Marke

Joint Principal Coordinators

Dr. Prabhat Kumar

Associate Prof, CSE Department, NIT Patna

Email: <u>prabhat@nitp.ac.in</u>

Dr. Somaraju Suvvari

Assistant Prof, CSE Department, NIT Patna

Email: <u>somaraju@nitp.ac.in</u> Mb: +91 9676430356

Proctor Coordinators



Dr. Moutushi Singh & Dr. Sanchita Ghosh
Dept. of Information Technology

Institute of Engineering and Management, Kolkata

Email: moutushi.singh@iemcal.com Contact No.: +91 94334 95413

Course Content

- Mobile App Development Introduction
 - o Java Concepts, Introduction to Android
- Android Software Development Kit (SDK)
 - Application Structure, Emulator-Android Virtual Device
- Interface Usability
 - o Basic UI design, Menu, Intents
- Android Application Development
 - Styles & Themes, Location Based Services and Google Maps, Sensors, Telephony Services
- Android Application Deployment

Registration Details

Please fill out registration form using the link below:

https://forms.gle/fC1rnTacbmDppGpW7

Registration fee:

Academic (student/faculty): 500 INR Industry Participants and Others: 1000 INR Foreign Participants: 4000 INR

Last Date to apply: July 15, 2022

Online payment details:

Beneficiary Name: NIT Patna Bank Name: Indian Bank A/C No.: 50380476798 IFSC Code: IDIB000B810

Contact Us

Link: http://www.nitp.ac.in/ict/index.php







Faculty Development Program On

"Outcome Based Education and NBA Accreditation"

2nd to 6th Jan 2023

Organized by

Department of Mechanical Engineering In Collaboration with IEM HRDC Institute of Engineering & Management

Kolkata-700091 West Bengal, India.



Registration

Participants can register here before 1st January https://forms.gle/rvkiwVZ3XH1PQuGYA

Advisory Committee

Prof. (Dr.) Satyajit Chakrabarti President,IEM Kolkata, India.

Prof. (Dr.) Satyajit Chakrabarti Director,IEM Kolkata, India.

Prof. (Dr.) Arun Kumar Bar Principal, IEM Kolkata, India.

Coordinators

Prof. (Dr.) Bikash Choudhuri, ME, IEM, Kolkata

Co-Coordinators

Prof. Joydip Ray, ME, IEM, Kolkata.

Organizing Committee

Prof. (Dr.) Dwaipayan De, HOD, ME, IEM, Kolkata.
Prof. (Dr.) Rahul Baidya, Asst. HOD, ME, IEM, Kolkata.
Prof. Sandip Kumar Chaudhury, ME, IEM, Kolkata.
Prof. Asim Dhar, ME, IEM, Kolkata.
Prof. Gunjan Kumar, ME, IEM, Kolkata.
Prof. (Dr.) Kaustav Pradhan, ME, IEM, Kolkata.
Prof. Barun Das, ME, IEM, Kolkata.
Prof. Ishita De, ME, IEM, Kolkata.

About the FDP

This FDP will explain the importance to enhance the knowledge about the outcomes based education (OBE) and its implementation in teaching learning processes. Further NBA accreditation not only encourages OBE, overall it improves the quality of engineering & management educational institute. NBA accreditation promotes new and innovative methods in education system through OBE. Main objective of this program is to enrich the knowledge of faculty and staff on how to reorient their teaching

learning processes to implement OBE for NBA accreditation.

Resource Persons

Eminent academicians and NBA expert from top institutes will enlighten us during the program.

About the College

Institute of Engineering & Management (IEM) was established as the first self-financed engineering college in the state of West Bengal at Kolkata in 1989. Since then, the institute has been socially accredited as the best self-financed engineering institute of West Bengal and admits top ranking students. The Institute achieved Grade A from National Assessment and Accreditation Council (NAAC). The institute runs full time four year B.Tech courses in CSE & CSE (AI, AIML, IOT, IOTCSBT and CSBS), ECE, EEE, EE,IT, and ME. The Institute also runs full time (2 years) M.Tech courses in CSE, ECE. Not only engineering courses theinstitute has under graduate and post graduate degree in management.

About the Department

The department of ME was set up in 2013. Over the years, the department has added to the physical infrastructure with the formation of laboratories and addition of equipment. The department boasts of an array of eminent teachers whose ability and commitment provide a great educational experience for the students. The department attracts the best of students from diverse background, which help to create a unique cross-cultural learning experience.

Who can participate?

All the faculty members, research scholars, and industry persons can attend the FDP.



FACULTY DEVELOPMENT PROGRAMME



On

"Outcome Based Education and NBA Accreditation"

Organised by Mechanical Engineering Department In Collaboration with IEM HRDC Institute of Engineering & Management, Kolkata

Guest Speakers



Prof. Rana Saha Jadavpur University



Prof. Naresh Rakha Indian Institute of Technology, Ropar



Prof. Swarnendu Sen Jadavpur University



Prof. B K Das
IIMT University, Meerut



Prof. Ajay Tripathi, GEC, Raipur



Prof. G. Janardhanan, NITTTR, Chennai

Date: 2nd to 6th Jan 2023

Registration Link: https://forms.gle/rvkiwVZ3XH1PQuGYA

Contact Details: Mobile No. 8787330883 Email ID: iem.medept@gmail.com

A REPORT ON

5(FIVE) DAYS [18.07.22-22.07.22] FACULTY DEVELOPMENT PROGRAM (ONLINE) ON INTRODUTION TO DATA ANALYTICS USING MATLAB

A five days (05) Faculty Development Program has been successfully conducted from 18th - 22nd July, 2022 by the **Dept. of Electrical Engineering, Institute of Engineering & Management, Kolkata** in collaboration with **National Institute of Technical Teachers' Training & Research (NITTTR), Kolkata [MHRD]**. The objective of the FDP is to provide a platform for discussion on computational intelligence on the basis of MATLab. The main motive behind the program is to learn and implement the computational intelligence in research area. The resource persons were invited from the eminent Institute NITTTR, Kolkata. Faculties from different Institutes of India along with the IEM-UEM family members were invited and among them around 85 were actively participated to this program. The said program was fully coordinated by Dr. Mandakinee Bandyopadhyay (Asst. Professor, Dept. of Electrical Engineering, Institute of Engineering & Management, Kolkata).

Summary of the said program is as follows:

Day 1: In the first half, Dr. N. K. Mandal introduced the importance of Data analysis in our daily life. Then Dr. Mandal directed about hands-on training on MATLab fundamentals by showing the basic Matlab operations like array operations, matrix operations, function creation, and plotting.

In the second half, Dr. Mandal discussed about the linear regression technique for single and multiple independent variables using the least-square method.

Day 2: In the first half, Dr. C. Chakraborty delivered a lecture on Basic Statistics including mean, median, mode, standard deviation, and linear regression, and concluded his lecture with logistic regression.

In the second half, the Optimization technique for various engineering problems has been discussed by Dr. N. Mandal along with some hands on practice using MATLab

Day 3: In the first half, Dr. I. Saha delivered his lecture on Supervised and Unsupervised learning. Dr. Saha emphasized the method of data clustering using the k-means algorithm.

In the second half, Dr. Saha taught about hands-on training on clustering using some known datasets followed by quizzes on the whole day lecture. The goodness of fit of the clustering has also been checked using a well-known method.

Day 4: In the first half, Dr. S. Roy delivered a lecture on the application of Machine Learning in real life by showing some real life case studies like classification and visualization of Alzhemer's Disease like volumetric convolution neural network and transfer learning.

In the second half, Dr. C. Chakraborty gave a lecture on Data Classification using the Bayesian method. Then he solved an air traffic problem using the Naive Bayes method. Finally, Dr. Chakraborty concluded his lecture with Support Vector Machine (SVM).

Day 5: In the first half 1st half, Dr. N. K. Mandal delivered a lecture on Monte carlo simulation and markov chain.

In the 2^{nd} half, the Principal Component Analysis was described followed by the hands on practice using MATLAB.

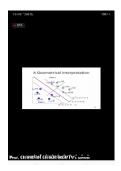
The program was concluded on 22nd July by the valedictory session in presence of the members of the advisory committee and the resource persons.

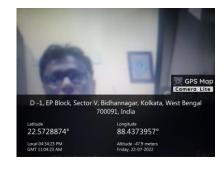
Here are some glimpses of the program:













FDP REPORT

FDP on Recent Advancement on Control & Instrumentation (10th July - 14th July 2023) organized by Department of Electrical Engineering, IEM Kolkata. The event was Technically Co-Sponsored by IEEE Joint CSS-IMS Kolkata Chapter.

The Speakers and the title of the topics are given below:

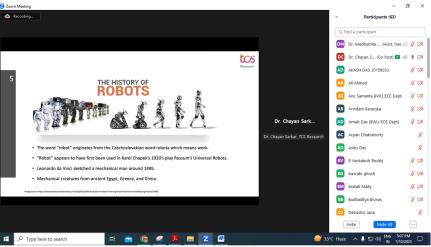
Sr No.	Name of the resource person	Affiliation with Address, phone number and email	Title of the lecture
1.	Dr. Sohom Chakrabarty	Assistant Professor, EE Dept., Indian Institute of Technology, Roorkee.	Recent application of reinforcement learning based control in robotic systems
2.	Dr. Chayan Sarkar	Scientist, TCS Research	DL based approached for NLP and vision problems for robotics.
3.	Dr. Manas Bera	Associate Professor, EE Dept., NIT Rourkela	Event-triggered control.
4.	Dr. Samiran Chattopadhyay	Professor, Department of Information Technology, Jadavpur University	National Education Policy
5.	Dr. Pratyusha Rakshit	Associate Professor, Department of ETCE, Jadavpur University	Machine Intelligence Approach to Brain-Computer Interfacing
6.	Dr. Arun Kumar Verma	Associate Professor, Electrical Engineering Department Indian Institute of Technology Jammu	"Control application in power converters"
7.	Dr. Sanjoy Kumar Parida	Associate Professor Department of Electrical Engineering Indian Institute of Technology Patna	Robust Wide-Area Damping Controller for Critical Low Frequency Oscillations in Power Systems
8.	Dr. Aritro Dey	Assistant Professor Department of Electrical Engineering NIT DURGAPUR	"Design of Flight Control Law for Fixed Wing Aircrafts & Quadcopters : Few Aspects".
9.	Dr. Shubhobrata	Assistant Professor	Application of backstepping

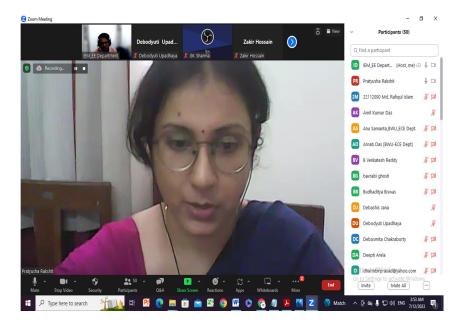
Rudra	Department of Electrical Engineering NIT Rourkella	controller for non-linear system

FDP included nine (9) speakers, 180 participants from all over India form different IITs, NITs, State Universities. Also we have participants from Woosong University, South Korea. The conference was concluded in Valedictory session on 14th July 2023.

Some photos clips







With Regards,

Coordinators:

Dr. Madhumita Pal (EE Dept.)

Dr. Rajib Malik (EE Dept.)