

Muktsar Road, Bathinda-151001, Punjab (INDIA)

(Approved by AICTE, New Delhi and Affiliated to Maharaja Ranjit Singh Punjab Technical University, Bathinda)
Contact: 0164-2786041, 95011-15401 www.bfcet.com email: principalbfcet@babafaridgroup.com

## **DVV CLARIFICATIONS 6.5.2**

S. No.	Collaborative Quality Initiatives	Collaborative Institution	Page No. of Collaborative Initiatives with other institutions along with brochures with geo- tagged photos with captions and date
1	AICTE & MRSPTU Sponsored Six days Online Faculty Development Programme "Waste Management & Environmental Protection for Sustainable Development"	Maharaja Ranjit Singh Punjab Technical University& All India council for technical Education	1-4
. 2	AICTE & MRSPTU sponsored six days online Faculty Development Program (IoT & Artificial Intelligence in Industry 4.0)	Maharaja Ranjit Singh Punjab Technical University& All India council for technical Education	5-16
3	AIIMS- Project on Depression Application	All India Institute of Medical Sciences(AIIMS),Bathinda	17 - 18
4	FESTO- Centre of Excellence	FESTO	19-20
5	Internal Hackathon-2022	Central University of Punjab,Bathinda	21-22
6	International Conference on Emerging Technologies for Computing, Communication and Smart Cities (ETCCS-2021)	Springer and sponsored by Ministry of Electronic and Information Technology (MeitY), Southern Federal University, Russia, UJW University, Poland, Indian Society For Technical Education, SD College Of Engineering & Technology, India, Maharaja Ranjit Singh Punjab Technical University, India	23-26

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7	AICTE-ISTE sponsored one-week online Orientation/Refresher Programme (PHASE – III) onDEVELOPMENTS IN AI & ROBOTICS"	All India council for technical Education & IndianSociety for Technical Education	27-32
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10	Five Days Faculty Development Programme onCyber Security	Electronics & ICT Academy-IIT Kanpur	41-43
11	Entrepreneurship Awareness Camp (2019- 2020) Sponsoredby Department of Science and Technology (DST), Government of India	Department of Science and Technology (DST), Government of India	44-46
12	Seminar on Entrepreneurship	Cheema Boilers Limited.	47-48
13	Webinar on Environmental Impact Assessment Process in India	JSW Steel Limited	49-51
14	Workshop on Solidworks	Maharaja Ranjit Singh Punjab Technical University , Punjab State Aeronautical	52-54
15	ISTE & AICTE Sponsored"outcome based educationteaching learning skills in digital age"	Engineering CollegePatiala  Indian Society for Technical Education & All Indiacouncil for technical Education	55-60

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16	DST & EDI, GOVT.OF INDIA Sponsered ENTERPRENURSHIP CAMP	Department of Science and technology & Enterprenurship Development Institute, GOVT. of INDIA	61-64
17	International conference on intelligent machines (ICIMs19)	Council of Scientific & Industrial ResearchIndian Society for Technical Education and Springer	65-69
18	Workshop on Digital Marketing and its Importance for Businessand Entrepreneurship	SkyCon Technologies	70-71
19	Entrepreneurship Awareness Camp	Enterprenurship Development Institute, NSTED, Department of Science and technology GOVT.OF INDIA	72-75
20	Seminar on Entrepreneurship: Steep Rise of Entrepreneurship in Generation of Solar Energy	Adani Solar Plant	76-78
21	Entrepreneurship Week	National Bank for Agriculture and rural Development	79-82

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#### **AICTE & MRSPTU Sponsored Six days Online Faculty Development Programme**

#### Waste Management & Environmental Protection for Sustainable Development

Waste Management & Environmental Protection for Sustainable Development" faculty development program in collaboration with Maharaja Ranjit Singh Punjab Technical University and All India Council for Technical Education is organized by Department of Civil Engineering, Baba Farid College of Engineering & Technology, Bathinda from 10<sup>th</sup>-15<sup>th</sup> January. More than 300 registrations were received across 24 States of India. The program was designed to spread awareness about the new techniques for effective utilization of waste & its management and sustainable development. It mainly covers the key elements of the waste management system & remedies for environment protection and sustainable development. Main topics discussed in the program was related to Waste Management, Waste Minimization Practices & Wealth from Waste, Sustainable Development Goals, Applications of Waste Materials and Clean Technologies for Sustainable Development, Healing of Earth during COVID-19 Lockdown, NEP-2020 and many more.

- 1. Prof Dr. Buta Singh Sidhu, Vice Chancellor, MRSPTU, Bathinda.
- 2. Col. B. Venket, Director, Faculty Development Cell, AICTE, New Delhi.
- 3. Prof (Dr) Adarsh Pal Vig, Hon'able Chairman, Punjab Pollution Control Board
- 4. Prof (Dr) Suresh Chand Jain, PU Chandigarh

#### Day -1, January 10th, 2022

1st Session: - The program was inaugurated by the Chief Guest Prof Dr. Buta Singh Sidhu, Honorable Vice Chancellor, Maharaja Ranjit Singh Punjab Technical University, Bathinda. He addressed the audience with great enthusiasm and described how a person is responsible for environmental protection by managing waste. The Guest of Honour Col. B. Venket, Director, Faculty Development Cell, AICTE, New Delhi graced the occasion and congratulated BFCET for organizing FDP on such topics which are interdisciplinary in nature and will lead toenvironmental protection and environmental sustainability. Er. Tanu Taneja (Convenor FDP) briefed the importance of faculty development program to all participants. Dr. Tejinder Pal Singh Sarao (Dean R&D, BFCET) delivered welcome speech to all the faculty members as well as delegates.

**Session 2<sup>nd</sup>** - Prof (Dr) Adarsh Pal Vig, Hon'ble Chairman, Punjab Pollution Control Board, Government of Punjab graced the occasion with his presence as our guest of honor as well as session expert for the event. He talked about waste management and impact of Swacch Bharat Abhiyan on sustainability. He also detailed about importance of 3R's Reduce, Reuse and Recycle in today's era.



**Session 3<sup>rd</sup> -** Prof Dr Suresh Chand Jain, Former Dean and Chairman, Department of Chemical Engg. & Tech., Panjab University elaborated about Waste Minimization Practices & Wealth from Waste.

- 1. Prof Dr. Manjeet Bansal, Dean Consultancy and Professor in Department of Civil Engg, MRSPTU Bathinda
- 2. Er. Naresh Kumar Garg, Principal Owner Newlife Engineers.
- 3. Dr. Mansha Swami, Assistant Professor, Civil Engineering Department, DIT, Dehradun.

#### Day -2 January 11th, 2022

1st Session: - Prof Dr. Manjeet Bansal, Dean Consultancy and Professor in Department of Civil Engg, MRSPTU Bathinda concluded about Waste Land Management. He cleared all the queries raised by participants on abovementioned topic.

**Session 2<sup>nd</sup>** - Er. Naresh Kumar Garg, Principal Owner – Newlife Engineers elaborated about Alternate Sources of Energy, non-conventional sources of energy, renewable sources of energy.

**Session 3<sup>rd</sup>** - Dr. Mansha Swami, Assistant Professor, Civil Engineering Department, DIT, Dehradun is a Transportation Engineering Professional detailed about Plastic roads & recycled asphalt pavement: Waste to Wealth. She cleared all the queries raised by participants on abovementioned topic.

#### Day -3 January 12th, 2022

#### Resource Person -

- 1. Prof Dr. Sanjeev Aggarwal, Dean Academics of GZSCCET, and Director of Construction Wing of MRSPTU, Bathinda.
- 2. Prof Dr. Jagdish, Professor, Presidency University, Bengaluru.
- 3. Dr. Suman Singh, Principal Scientist, CSIR-CSIO, Chandigarh.

1st Session: - Prof Dr. Sanjeev Aggarwal, presently he is Professor of Civil Engineering, and also serving as Dean Academics of GZSCCET, and Director of Construction Wing of MRSPTU, Bathinda concluded about Waste Management in Transportation Infrastructure Development. Session was interactive and professionals found this session very insightful.

**Session 2<sup>nd</sup>** - Prof Dr. Jagdish, currently working as a professor in Presidency University, Bengaluru elaborated about waste water management, its collection, transportation, treatment and disposal and how it is hazardous to society if not handled properly.

Session 3<sup>rd</sup> - Dr. Suman Singh, Principal Scientist, Materials Science and Sensor Applications

(MSSA), CSIR-CSIO, Chandigarh concluded her talk on Chemical and Bio-Chemical Waste Management, various rules associated with it

Day - 4 January 13th, 2022

#### Resource Person -



- 1. Dr. Prashant Kumar, Sr. Scientist, CSIR-CSIO, Chandigarh.
- 2. Dr. Sanjay Sharma, Professor, NITTTR, Chandigarh,
- 3. Dr. Anoop Verma, Associate Professor, Thapar Institute of Engineering & Technology, Patiala.

1<sup>st</sup> Session: - Dr. Prashant Kumar, Sr. Scientist, Intelligent Machines and Communication Systems (IMCS), CSIR-CSIO detailed about Groundwater vulnerability and risk mapping using GIS and Sustainable Development Goal 6.

Session 2<sup>nd</sup> - Dr. Sanjay Sharma, Professor in department of civil engineering, NITTTR, Chandigarh elaborated about Clean Technologies for Sustainable Development and importance of sustainable environment.

**Session 3<sup>rd</sup>** - Dr. Anoop Verma, working as an Associate Professor at School of Energy and Environment, Thapar Institute of Engineering & Technology, Patiala, India concluded his talk on Applications of Waste Materials towards Environmental Remediation: An Approach towards Sustainable Development.

#### Day - 5 January 14th, 2022

#### Resource Person -

- 1. Prof (Dr.) Vinod Kumar Garg, Professor, Central University of Punjab.
- 2. Dr. M.S. Dhanya, Assistant Professor, Central University of Punjab.

1st Session: - Prof (Dr.) Vinod Kumar Garg, presently working as Professor at the Department of Environmental Science and Technology, Central University of Punjab detailed about Nuclear Energy in India. Session was interactive and professionals found this session very insightful.

**Session 2<sup>nd</sup>** - Dr. M.S. Dhanya, currently working as Assistant Professor at Department of Environmental Sciences and Technology, School of Environment and Earth Sciences in Central University of Punjab elaborated about Ozone Protection and its Importance. Influence of COVID-19 on healing of ozone layer.

**Session 3<sup>rd</sup>** - Prof (Dr.) Vinod Kumar Garg, presently working as Professor at the Departmentof Environmental Science and Technology, Central University of Punjab detailed about Healing of Earth and Ecosystem during the COVID-19 Lockdown.

#### Day - 6 January 15th, 2022

#### Resource Person -

- 1. Dr Nitin Saluja, Associate Professor, Chitkara university.
- 2. Dr. Sohan Chandel, Psychologist and Corporate Trainer

1<sup>st</sup> Session: - Dr Nitin Saluja, Associate Professor from Chitkara university detailed about NEP-2020: An overview. The National Education Policy (NEP) 2020 has set the bar high for higher education



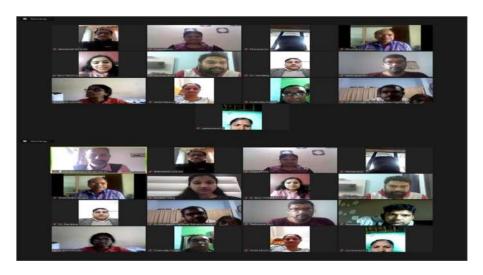
institutes in the country. It envisages nurturing a vibrant campus life, incorporating a holistic and multidisciplinary approach to imparting education with the objective of developing a workforce which is creative and multi-talented.

**Session 2<sup>nd</sup>** - Dr. Sohan Chandel, Psychologist and Corporate Trainer, Founder NMET Pvt. Ltd. elaborated about 3H's-Holistic, Health and Happiness. How to nurture stress free life and how one can improve the Communication, Interpersonal, Teambuilding and Leadership skills. He inspired people, suffering from anxiety, stress, depression and negativity in life.





#### Brochure of the FDP Sponsered by MRSPTU & AICTE



Glimpses of the FDP 10th-15th Jan 2022



# AICTE & MRSPTU sponsored six days online Faculty Development Program IoT & Artificial Intelligence in Industry 4.0

Six days online faculty development program sponsored by AICTE & MRSPTU on "IoT & Artificial Intelligence in Industry 4.0" organized by Department of Electrical Engineering, Baba Farid College of Engineering & Technology, Bathinda from 17<sup>th</sup>-22<sup>nd</sup> January. More than 300 registrations were received across 24 States of India. The program was described important transformation is necessary to accompany the volumes of data produced by the Internet of things and need of network identification because in modern ADN there is rapid growth in demand side technologies and distributed energy resources. Main topics discussed in the program was related to Applications of Machine leering, Network Identification in Modern PS through AI, AI Based adaptive control technique for grid integrated, AI based adaptive control technique for solar power Electric vehicle, Emerging trends in AI & IoT, Introduction to Internet of Robotic things (IORT), AI & Robotics in Industry 4.0, Solar MPPT Tracking using Artificial Intelligent Technique, IOT and Cyber Security, Future of IOT (Predictive Analytics), Efficient Intelligent Control for Electrical Management System, National Educational Policy (An Overview), Explore various research opportunities and challenges in the field of IOT, AI and its applications, Free and Open-Source Frameworks for IoT and Industry 4.0, AI/IOT Application in Power System, Real Time Streaming Libraries for IoT and Industrial Applications.

#### Day 1: Monday, January 17th, 2022

#### Resource Person -

- 1. Prof Dr. Buta Singh Sidhu, Vice Chancellor, MRSPTU, Bathinda.
- 2. Col. B. Venket, Director, Faculty Development Cell, AICTE, New Delhi.
- 3. Dr. Suhas M. Kakade, COE, Pune
  - 4. Dr. Priyank Shah, University of Warvick, UK

1st Session: - The program was inaugurated by the Chief Guest Prof Dr. Buta Singh Sidhu, Honorable Vice Chancellor, Maharaja Ranjit Singh Punjab Technical University, Bathinda. He addressed the audience with great enthusiasm and discuss emerging AI & IoT trends in different sectors alongwith related research in these sectors. The Guest of Honour Col. B. Venket, Director, Faculty Development Cell, AICTE, New Delhi graced the occasion and



congratulated BFCET for organizing FDP on IoT & Artificial Intelligence in Industry 4.0. Er. Harsimran Singh (Convenor FDP) briefed the importance of faculty development program to all participants. Dr. Tejinder Pal Singh Sarao (Dean R&D, BFCET) delivered welcome speech to all the faculty members as well as delegates.

Session 2: - Dr. Suhas M. Kakade, COE, Pune: The topic for the second session was Applications of Machine learning. He started the talk by explaining basics of Machine learning by taking few daily life examples. He explained the supervised, unsupervised learning of machine learning. As the session proceeded, he explained the classification of advanced machine learning- Neural network (NN), Convolutional neural networks (CNN), Recurrent neural networks (RNN), Deep Neural Network (deep learning), Generative Adversarial Networks (GAN). He also discussed the applications of Advanced machine learning-

Furthermore, he explained the other interesting applications – Text to Image, Text to Video, Scene synthesis from unseen direction, zero shot learning/one shot learning/ few shot learning. He added his collaborations sponsored through IDMRP Grant which is to investigate how well the selected machine learning and deep learning algorithms perform to predict the solar. The explanation of the algorithms and work done used in above project was explained by one of his M. tech students.

Lastly, he also cleared the doubts of participants effectively.

Session 3: Priyank Shah [Postdoctoral Research Fellow, University of Warwick, UK] The topic for the second session was 'Network Identification in Modern PS through AI'. He started this session that about 2020, an important transformation is necessary to accompany the volumes of data produced by the Internet of Things. After that he talked about the needof network identification because in modern ADN there is rapid growth in demand side technologies and distributed energy resources. After that he talked about the problems related to ADNs i.e. aging of assets, lack of network visibility and controllability because these problems effect various estimation and control operations of modern DMS. Dr. Shah also discussed about why the knowledge of accurate And model is important to be estimated. He further discussed about the objectives of network identification and also its applications. He discussed about the device used in this is phasor measurement unit (PMU) and smart meter. Dr. shah further discussed about the type of input data i.e. in PMU the data is in the form of voltage phasor and current phasor and in smart meter the input data is in the form of voltage and current magnitude, active and reactive power, power factor. Then he discussed about the



frequency of data update intervals for electricity smart meter. Further he discussed about the network identification with PMU dataset and its problem formulation. Then he explained the detailed process of voltage and current measurements.

At the end of session, he concluded this session that the proposed framework estimates the system architecture of the active disturbance network using synchronous and non-synchronous measurements and the proposed framework accurately estimates the branch parameters and variation in branch parameters for irrespective of the balanced and unbalanced lattice of benchmarked distribution network. The proposed framework accomplishes the identification objectives even with the presence of the noise in D-PMU measurements.

Lastly, he also cleared the doubts of participants effectively.

#### Day 2: Tuesday, January 18th, 2022

#### Resource Person -

- 1. Dr. Nishant Kumar, IIT, Jodhpur
- 2. Dr. Nishant Kumar, IIT, Jodhpur
- 3. Dr. Mala Kalra, NITTTR, Chandigarh

Session 1: Dr. Nishant Kumar, IIT Jodhpur The topic for the first session was "AI Based adaptive control technique for grid integrated". He started the talk by classification of solar energy conversion system. He added content related to sandstone and grid interface for single phase and three phase system. Dr Nishant discussed about the inverter arrangement in control strategy of solar energy in term of load interface with DC-DC converter in DC micro grid and DC-AC converter for AC loads. As the session proceeded, he explained development of neural network theory-based control technique for solar PV array integrated grid system. In classification of control techniques sir covered d-q control, SDGI based control, LMS/LMF based Control, Kalman Filter based Control, Space vector filter-based control, moving average filter-based control and orthogonal component-based control. He also discussed ANOVA kernel stochastic gradient descent algorithm to use the improve the estimation accuracy. He said Kernal tick is used for mapping in high dimensional space, which realizes a linear relationship n between the input signals during mapping into the HDS.



Lastly, he also cleared the doubts of participants effectively.

Session 2: Dr. Nishant Kumar, IIT Jodhpur The topic for the second session was "AI based adaptive control technique for solar power Electric vehicle" First of all she discussed about new technologies and their concerns. After that he talked about e design of an electric driven vehicle that can regenerate power using solar energy technology. If this type of vehiclebecame a standard commercial vehicle, the demand for fuel would decrease substantially. He said designing this vehicle for practicality is the primary difficulty. The vehicle must be lightweight to minimize the size of the motor required to withstand urban transport needs. After that he talked about the long-term objective of this project is to design, fabricate and assemble a fully functioning vehicle powered by solar energy, which in the future can be used to compete in the Shell Eco Marathon. He said about the frame design, powertrain, battery research selection and purchase, staring and suspension. He further discussed environmental impact of feasible alternative energy vehicles will have a positive impact on the environment. Since combustion engines never achieve complete combustion, resulting extraneous gases add to the problem of global warming. Electric motors produce zero emissions; therefore, the application of urban electric driven vehicle will dramatically decrease the amount carbon dioxide (CO2) contributing to global warming. As the session proceeded, he explained the control of solar power and characteristics of PV Arrays.

At the end of session, he talked about solar PV system of MPPT testing and deterministic optimization algorithm. In which he covers Hill climbing, incremental conductance method, fractional open-circuit voltage, fractional short circuit current, ripple correlation control, discreate-time ripple correlation control, current sweep, DC-Link capacitor droop control and MPPT techniques fuzzy logic based MPPT control. Lastly, he also gives the answers queries raised by the listeners.

Session 3: - Dr. Mala Kalra, NITTTR, Chandigarh: The topic for the third session was Emerging trends in AI & IoT. She started session that how the convergence of AI & IoT can redefine the way industries function. So, emerging AI & IoT trends in three sectors alongwith related research in these sectors. She further explained that IoT is all about embedding sensors into machines, vehicles that continuously generate data streams through internet connectivity. She explained that IoT applications follow five basic steps create, communicate, aggregate, analyze and act. Dr. Kalra explained about cloud computing that cloud services facilitates instantaneous databases, storage and the benefits of cloud



computing is scalability and data mobility. It also does not involve huge initial investments but if you work with real time application then cloud will be challenging such as health monitoring because it creates delay for result which was not acceptable. Then she moves to fog/edge computing which is providing data processing capabilities & storage facilities. Fog computing is a distributed computing paradigm that acts as an intermediate layer between cloud data centers & IoT devices whereas edge computing enables data processing at the end devices.

She further explained that the impact of blending AI & IoT on three major sectors i.e. agriculture, healthcare and industrial automation. AI & IoT in agriculture will increase the quantity and quality of production. With the help of AI we can make agricultural robots that reduce human efforts and save time by performing multiple tasks at one time, monitor and harvest crops more effectively.

Dr. Kalra further explained that the most useful application of AI in healthcare is that the remote patient monitoring (RPM) systems use wearable's to monitor the condition of monitors, useful for monitoring the corona patient and many more. At last, she said that in manufacturing industry AI automate complex tasks, prediction of machine failure and for quality checks and then she described about digital twin which is a digital representation of a physical object in operation.

#### Day 3: Wednesday, January 19th, 2022

#### Resource Person -

- 1. Dr. KS Nagla, NIT, Jalandhar.
- 2. Dr. Amandeep Kaur, CUP, Bathinda
- 3. Dr. Shimi S.L, NITTTR, Chandigarh

Session 1: - Dr. KS Nagla: The topic for the session was Introduction to Internet of Robotic things (IoRT). He started the talk by explaining importance of Robotics by taking few daily life examples- swimming robots, Flying Robots, Robotic Balls, Swarm robots, Snake robots, Micro robots, Nano robots, crawler robots, Hybrid Robots, etc. He further explained the classification of robots in terms of applications- Space Robots, Military Robots, medical robots, industrial robots, service robots, etc. As the session proceeded, he discussed the world



robot report 2021, according to this report, the use of industrial robots in factories around the world is accelerating at a high rate: 126 robots per 10,000 employees is the new average of global robot density in the manufacturing industries – nearly double the number five years ago (2015: 66 units).

Furthermore, he explained the other interesting biological background based on AI .IoRT supports artificial intelligence (AI) in robotics, machine learning, perception, sensor fusion and swarm technologies, SLAM, Localization, mapping etc. will provide the next phase of development of IoT applications. While artificial intelligence and machine learning allow/empower these machines to function using decision making and learning algorithms instead of programming. Then he talked about the experiment - IoRT: sensor Fusion. Mapping is done in 2D ad 3D.

Lastly, he also cleared the doubts of participants effectively.

Session 2: Dr. Amandeep Kaur Central University of Punjab, Bathinda, the topic for the second session was "Artificial Intelligence & Robotics in Industry 4.0" First of all she discussed about Industrial revolution in which she covers the industrial revolution of manufacturing with steam and waterpower and mass production assembly lines using electric power in 1st and 2nd revolution. In 3rd and 4th revolution she covered automated production using electronics, plc IT system and robotics and autonomous decision making of cyber physical system using machine learning through cloud technology. After that she talked Artificial intelligence in the fourth industrial revolution is beginning to live up to its promises of delivering real value necessitated by the availability of relevant data, computational ability, and algorithm. Therefore, this study sought to investigate the influence of artificial intelligence on the attainment of sustainable Development Goals with a direct focus on poverty reduction, goal one, industry, innovation, and infrastructure development goal 9, in emerging economies. She said Industry 4.0 or the fourth industrial revolution (4IR) is gaining a lot of attention particularly on its potential impact on humanity Schwab argued that 4IRwill change how human beings live, work and how the economies work as well as how we are governed.

At the end of session, she talked industry 4.0 introduces the self-automation method, self-configuration method, self-diagnosing and intelligence decision making. She explained the use of ICT, sensor technology and robotic technology make it possible to record the



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production process of each element (instead of sampling and control) and detecting errors that occur during the process.

Lastly, she also give the answers queries raised by the listeners.

Session 3: - Dr. Shimi S.L: The topic for the session was Solar MPPT tracking using artificial intelligent technique. She started her session that there are two basic approaches in maximizing the power extraction using automatic sun tracker and searching for the MPP conditions. For the maximum power she said firstly take the height of projectile that is fired straight up is given by the motion equations. She explained that by the calculus technique we can find out the maximum peak. Then she further explained about partial shading of solar panels. Dr. Shimi explained the I-V & P-V characteristics of photovoltaic cell. Then she explained the mathematical modeling by taking three equations by taking solve is equal to zero, positive and negative. She described the MPPT model of PV system. Then she explained buck converter and list of parameters of buck converter. Then she compared the results with experimental results inside the laboratory with like vikram solar.

Dr. shimi explained about the simulation model of MPPT solar and efficiency of MPPT solar. She did this experiment with different algorithms and compared these results and take that results which gave maximum efficiency. She further played video of her laboratory work that how the system works and also explained the simulation model. Then she further explained the artificial intelligence fuzzy logic toolbox by showing some experiments and explained about adaptive neuro fuzzy inference system (ANFIS).

Lastly, she also cleared the doubts of participants effectively.

Day 3: Thursday, January 20th, 2022

Resource Person -

1. Dr. Parwinder Singh, CUP, Bathinda



#### 2. Dr. Rajinder Kumar, NIT, Kurukshetra

#### 3. Dr. Abdul Saleem, IIT, Roorkee

Session 2: Dr. Rajinder Kumar NIT, Kurukshetra The topic for the second session was "Future of IOT (Predictive Analytics)" First of all she discussed about new technologies and their concerns. After that he talked Enterprises and service providers have been looking at IoT as a key enabler to drive digital transformation and to unlock the operational efficiencies. Advances in Artificial Intelligence coupled with ubiquitous connectivity, and real-time communications are enabling exponential growth in efficiencies generated by IoT. As machines and products

have started communicating with each other without any human intervention, the real value of data is getting generated through better and faster decision-making, He said Emerging technologies such as Internet of Things (IoT) are shaping our lives and disrupting the traditional businesses at a rate of change never seen before in the history. Enabled by exponential increase in computing power and availability of large amount of data, machines are fast learning to replace humans in several areas. This "intelligence" is moving away from central server farms into devices and things that will soon become a part of our everyday lives. These devices will potentially negotiate their own way in our world via "smart contracts" and without any significant human intervention

At the end of session, he talked about Generative Adversarial Networks based on strategy where two different networks are pitted against one another and two networks in in learning battle. In goal of GAN he said one of two networks creates new samples that are so close to training data that other network. Lastly, he also gives the answers queries raised by the listeners.

#### Day 5: Friday, January 21st,

#### 2022 Resource Person –

- 1. Dr. Amit Kauts, GNDU, Amritsar
- 2. Dr. Gaurav Kumar, Director, MRCS

**Session 1: - Dr. Amit Kauts: Session 1: -** The topic for the session was 'National Education Policy 2020 (An Overview) . He started the talk by asking questions



related to national education policy as what participants know before about it, what kind of knowledge they have related to it. After that he talked about new school education structure:- Foudational stage ( age 3-8), preparatory stage (8-11), middle stage (11-14) and secondary stage (14-18). He further explained the classification of National coordinators- UGC (Non technology post graduation degree programme), NPTEL, IIT Madras (technical/ engineering UG & PG degree programme), CEC ( Non technology under graduation degree programme ), IGNOU (diploma and certificates programme), NCERT (School education, program from 9<sup>th</sup> to 12<sup>th</sup>), NIOS ( out of school children educational programmes), IIM banglore (Management programme), NITTTR( Teacher training programme).

Furthermore, he explained the other interesting subjects which are now taught in India as a priority basis which are Artificial intelligence, design thinking, holistic health, organic living, environment education, global citizenship education, mathematics. Then he talked about the institutional restructuring and consolidation.

Lastly, he also cleared the doubts of participants effectively.

Session 2: - Dr. Gaurav Kumar: Dr Gaurav Kumar, Founder Director and First Promoterof Magma Research and Consultancy Services, India. His Qualifications integrate MCA, M.Phil. (Computer Science), M.Tech. (I.T.), Ph.D. (Computer Science), LL.B. and IBM Certified Associate Developer. He obtained the International Certifications in Data Science, Python, Blockchain Programming, Machine Learning, Software Testing and related technologies from corporate giants including IBM, Google, Accenture and many others. Dr Kumar possesses more than 18 years experience in Teaching, Industry and Research. He delivers the Practical Hands-On Sessions on recent technologies in Workshops, Faculty Development Programmes (FDPs), Short Term Courses (STCs) and Technical Events as Resource Person in various states of India.

#### Day 6: Saturday, January 22st,

#### 2022 Resource Person –

- 1. Dr. Vedantham Lakshmi, Srinivas, IIT Dhanbad
- 2. Dr. Gaurav Kumar, Director, MRCS



#### **3.** Valedictory

Session 1: Dr. V. Lakhsmi Srinivas, IIT Dhanbad. The topic for the session was, 'AI/Iots applications in Power system'. He started the talk by explaining the advances in power systems and power system- intelligent control of grid interfaced and off-grid DG/PV systems. After that he explained the typical configuration of power system-explaining the terms state estimation, visualization, energy management functions, communication input/output controllers transfer data to computers, data collected at remote terminal units. Furthermore, Dr. talked about traditional power systems and why power systems is shifted to smart grids. He said there are challenges of today's evolving electricity grid which are integration of renewable energy sources into main grid, renewable energy sources are located far away from load centres, conventional energy sources are getting retired, introduction of power electronics converters in the grid and increase in global demand of electricity.

As the session proceeded, he talked about the control center of power system and its functions- state estimation, economic dispatch, optimal power flow, unit commitment, load forecasting and security assessment. After that he mainly focused on system monitoring of the power system and its key feature of a smart grid, GPS-synchronized phasor measurement units and communication technologies enable advancements in system monitoring.

Lastly, he also cleared the doubts of participants effectively.

Session 2: - Dr. Gaurav Kumar: Dr Gaurav Kumar, Founder Director and First Promoterof Magma Research and Consultancy Services, India. His Qualifications integrate MCA, M.Phil. (Computer Science), M.Tech. (I.T.), Ph.D. (Computer Science), LL.B. and IBM Certified Associate Developer. He obtained the International Certifications in Data Science, Python, Blockchain Programming, Machine Learning, Software Testing and related technologies from corporate giants including IBM, Google, Accenture and many others. Dr Kumar possesses more than 18 years experience in Teaching, Industry and Research. He delivers the Practical Hands-On Sessions on recent technologies in Workshops, Faculty Development Programmes (FDPs), Short Term Courses (STCs) and Technical Events as Resource



Person in various states of India.

Session 3: Valedactory: In the last session of the program, quiz took place from 1:00 p.m. to 1:30p.m. Firstly Er. Harsimran Singh FDP Coordiator and HOD of electrical department insighted about the program. After that the guest of honor, Dr. Balwinder singh sidhu coordinator AICTE and MRSPTU MOU talked about the FDP program and upcoming programs for non teaching staff also. At last Dr. Hardeep Singh from BFCET thankedeveryone who have participated in the FDP and he also added that the objective of this programme to bring different experts, their reasearches of AI and Iots is fulfilled. Furthermore, he thanked every expert who had delivered their best to succeed the FDP. He is also requested participants to share their valuable experience and must share this knowledgeto their students so that students will get maximum benefit. Meanwhile, He also congratulated and thanked to AICTE & MRSPTU, Er. Harsimran Singh FDP Coordiator, convenor, co-convenor, every member of organizing team of BFCET and all other participants who have made this event successful



Brochure of the Faculty Development Programme on IOT & Artificial Intelligence in Industry 4.0





# 'ਇੰਟਰਨੈੱਟ ਆਫ਼ ਥਿੰਗਜ਼ ਐਂਡ ਆਰਟੀਫੀਸ਼ੀਅਲ ਇੰਟੈਲੀਜੈਂਸ ਇਨ ਇੰਡਸਟਰੀ 4.0' ਬਾਰੇ ਆਨਲਾਈਨ ਫੈਕਲਟੀ ਡਿਵੈਲਪਮੈਂਟ ਪ੍ਰੋਗਰਾਮ ਕਰਵਾਇਆ

महिला है नहीं में हैं है हमा में हैं हमा में हमा है है हमा हमा है हमा ह

# 'ਇੰਟਰਨੈੱਟ ਆਫ਼ ਥਿੰਗਜ਼ ਐਂਡ ਆਰਟੀਫੀਸ਼ੀਅਲ ਇੰਟੈਲੀਜੈਂਸ ਇਨ ਇੰਡਸਟਰੀ

4.0' बार्च भारतलाष्ट्रीत दैवलटी इिन्हेलप्रभेंट प्वावाभ ववन्याष्ट्रभा विभाग वर्ष्टम, 2 बरबते ( इवर्षपट विभाग मां ) बाय ब्रोट वरणा भारत वर्ष्टमाने वर्षा र राज्यमा, वर्षणा का वर्षणा मां कार्यक्र विभाग कार्यक्रिय क्रांत्रिक क्षांत्रिक क्षांत्रिक

समाज-पारच्या बर्चाव्यक्ति विकाश कि पुंतरण भरत विकाश साम विकाश के कि विकाश के मित्र के मार्थिक विकाश कि प्रतिकाश के विकाश के मित्र के मार्थिक विकाश के मार्थिक के मार्थक के मार्थिक के मार्थिक के मार्थिक के मार्थिक के मार्थिक के मार्थक के मार्थिक के मार्यिक के मार्थिक के मार्थिक के मार्थिक के मार्यिक के मार्यिक के मार्यिक के मार्थिक के मार्य

वासान पर पूर्ण प्रशासन करने प्रस्तु इन्सर वावक वार्त्र । यन्य कारण प्रशासन करने करने कर सार अंद अध्यासक करने क बारों विकारक में कि दिन पुरावण दिन बाद के - अ दे पढ़ें पाने में कई विकारकों के स्थासित के स्वेतिक कर सिकेटीय 200 विकारों त्रियां भड़े 100 विकार मारावण है वार्त्र के काल किया विकार अध्यासक दिनेतीर बेटलेंड वाय विकारहोता के केन्स्रेट विकार पुरावण के पुरावण करने कारण किया कारण करने किया प्रसाद आप कारण विकार मारावण करने के करने के स्वेति है अपने दे के प्रतिकार सुर्वासिकीर के प्रतिकार करने कारण है जा इस किया प्रसाद है पूर्ण प्रतिकार करने विकार के रात्रीन करने होंगे, कारण विकार के स्वेतिक करने किया करने के स्वेतिक करने किया

Glimpses of the Faculty Development

Programme 17th-22nd Jan 2022



#### **AIIMS- Project on Depression Application**

Date of Workshop:6th March 2021

Program: Computer Science & Engineering

No. of Students participated:12

Name of Resource Person: Dr.Jatinder Kumar

Name of collaborative institute: All India Institute of Medical Sciences

(AIIMS)Bathinda

A one-day workshop on cooperation projects was held by the department of computer scienceand engineering. Along with AIMS, this workshop was effectively put together. The seminar was held at the Block E conference room of Baba Farid College of Engineering and Technology. The workshop's main emphasis was on the project's fundamental needs for the Depression application. Its goal was to improve understanding of the main research instruments employed in the project.

This workshop was directed by Dr. Divisha Garg. All the dignitaries greeted her with kindness. This session was attended by a total of 12 CSE department faculty members. On March 6, 2021, it was successfully organised. This workshop was designed to improve the project's fundamental details, future goals, functionality, and applications, followed by the usage of an Android application and its significance.

Dipression Application was the endeavour. Everyone experiences depression differently. It's crucial to have quick access to assistance if you ever need it, regardless of whether you're dealing with severe sadness, loneliness, sorrow, or significant stress that's negatively affecting your health. A mobile app might be a helpful additional or independent tool for treating depression symptoms. The benefits include not needing travel, insurance, or appointments. Convenience and discretion are essential.

Immediately following a discussion on creating activities, gauging moods, and keeping track of sleep, the goals were decided upon. Dr Jatinder furthermore contrasted the findings of earlier and more recent research.

In order for AIMS' initiative to be successful, it must include information on nutrition recommendations, mood patterns, and patient and physician connections. Himanshu



Goyal and Rohan Sharma, two of our pupils, have carried out the same action



MoU Signed with AIIMS, Bathinda



#### Festo – Centre of Excellence

**Date of Workshop:** 31-05-2022 to 06-06-2022

**Program:** Mechanical Engineering

No. of participated: 8

Name of resource person: Mr. Usman Ali (Didactic Trainer)

Name of Collaborative institute: FESTO

Baba Farid College of Engineering & Technology organized a workshop in FESTO on "Industrial Automation" for the faculty. The event was coordinated by Dr. Manpreet Singh, Assistant Professor, Department of Mechanical Engineering. A total of 06 faculty members and 02 students attended the workshop. This workshop was organized to know about industrial automation, kits of the Pneumatic/Electro Pneumatic systems, PLC Programming, introduction to FluidSim P, TIA Portal, Simatic Manager CIROS software.





## Workshop

on

## Festo – Centre of Excellence

for

#### **Mechanical Engineering**

in collaboration with

Name of Resource Person

Mr. Usman Ali

Didactic Trainer

Date: 31-05-2022 to 06-06-2022





**Brochure of Festo-Center of Excellence** 





**Glimpse of FESTO- Centre of Excellence** 



Geotagged photograph of the same location as on Dated 13-06-2023



#### **Internal Hackathon-2022**

**Date of Workshop:** 12- 4- 2022

**Program:** Computer Science Engineering

Name of resource person: Dr. Amandeep Kaur (Professor,

Department of Computer Science,)

Name of Collaborative institute: Central University of

Punjab ,Bathinda

Baba Farid College of Engineering & Technology, Bathinda successfully organized Internal Hackathon-2022 in offline mode on 12.4.2022. Dr. Jyoti Bansal, Principal, BFCET shared the importance of Smart India Hackathon-2022 (SIH-2022). Jury members Dr Amandeep Kaur, Professor, Department of Computer Science, Central University of Punjab, Bathinda, Dr. Zavad Ahmed Khan, Professor & Dean, Faculty of Sciences, Baba Farid Group of Institutions (BFGI), Bathinda and Er. Davinder Singh Mann, Manager Terminal, IOCL, Bathinda shared their feedback during the event and congratulated the students for their wonderful ideas. Experts shared that (SIH-2022) is a nationwide initiative to provide students a platform to solve the problems we face in our daily life. Experts shared that shortlisted teams will participate in the 5th Edition of SIH-2022 to be organized in the month of July 2022.



**Brochure of Internal Hackathon-2022** 





**Glimpses of Internal Hackathon** 



Geotagged Photograph of same location as on Dated 13-06-2023



## International Conference on Emerging Technologies for Computing, **Communication and Smart Cities (ETCCS-2021)**

**Date of Conference :** 21-08-2021 – 22-08-2021

Name of Collaborative institutions: Springer,

,MEIT,AICTE&CSIR

Chief Guest: . Prof. Anil D. Sahasrad

Two days online International Conference on "Emerging Technologies for Computing, Communication and Smart Cities" (ETCCS-2021) organized by Baba Farid College of Engineering & Technology, Bathinda in technical collaboration with Springer and sponsored by Ministry of Electronic and Information Technology (MeitY), All Indian Council for Technical Education (AICTE) and Council of Scientific & Industrial Research (CSIR), New Delhi successfully held on 21st-22nd August 2021.

The main objective of the conference was to provide international platform to share the new advancements and innovations in the Artificial Intelligence (AI), Wireless Networks, Security and Internet of Everything (IoE). The five tracks of the conference covered the latest technologies being used worldwide in 21st century and Industry 4.0. ETCCS'21 provided a spectrum of opportunity to share new concepts amongst the technologist, industrialists, researchers and students (from research areas of AI, Wireless Networks Security and IoE).





**Brochure of the Conference ETCCS'21** 

Prof. Pardeep Kaura, Deputy Director Academics, Baba Farid Group of Institutes (BFGI) welcome chief guest and other dignitaries during the inaugural ceremony of the conference. He further added that conference will provide an insight in to wide spectrum of emerging technologies and congratulated BFCET for organizing this conference and appreciated the participants.

Dr. Nimisha Singh, Dean Trainings, BFCET introduced the conference speakers while Dr. Jayoti Bansal, Principal BFCET, briefed the audience about the conference. Prof. Anil D. Sahasrad Chairman AICTE New Delhi was the Chief Guest of the Inauguration Ceremony. He addressed the audience on the power of supercomputers and how it is helping India in one of the key sectors, that is, Agriculture. Prof Sharadha also threw light on AI, IoT, Data Science, Industry 4.0, Augmented Reality and Cyber Security. He said that Smart Cities is the next dream project of the nation.

In plenary session, Dr. Sachin K. Mangla, University of Plymouth, United Kingdom delivered keynote address. He gave an outstanding talk on Industry 4.0 Technologies for Sustainable Business Operations in order to build connectivity between IOT and digitalization. Convener of Conference, Dr. Tejinder Pal Singh Sarao thanked all speakers for sparing their time and effort they took to share their expertise with audience in conference. He paid special thanks to Prof. Anil Sahasrabudhe and Dr. Mangla for sharing their valuable knowledge with the audience.



Keynote speaker, Dr. Anand Nayyar of Duy Tan University, Da Nang, Vietnam delivered expert talk on Internet of Robotic Things (IoRT): Applications, Challenges, and Research Directions. Prof. Pao Ann Hsuing of National Chung Cheng University, Taiwan took session on Latest Trends in Deep Learning. Dr. Sanjay Misra, Convent University, Nigeria delivered invited talk on topic Emerging Technologies (IoT, IoE, Edge, and Fog Computing). keynote speaker Pastor Jr. Arguelles, Dean, College of Computer Studies, Calabarzon, Philippines delivered talk on Soft Computing in Modern Aera of Technology. Dr. Polkowski, UJW at Faculty of Technical Sciences, Poland delivered talk on Role of IT in Business considering Industry 4.0.

In the valedictory session, Dr. Nimisha Singh, Dean Trainings BFCET welcomed Principal BFCET, faculty members and participants on the valedictory ceremony of International Conference. She thanked our all keynote speakers from United Kingdom, Taiwan, Vietnam, Nigeria, Poland, Philippines for their wonderful talk in different sessions of the conference. Dr. Tejinderpal Singh Sarao, Convener of the conference shared report of conference. He briefed that over 200 research papers submitted from India and abroad including Italy, Poland, Vietnam, Nigeria, Malaysia, South Korea, Taiwan and many more. With the support of our reviewers team from Hungry, Iraq, Italy, Poland, South Africa, Malaysia and Nigeria including India. Out of 200 paper submissions, 36 full length papers & 8 invited papers were selected for presentation & finally paper will be published with Springer. Prof. Harsimran Singh, Dean Consultancy, BFCET delivered vote of thanks. He extended his thanks to the participants, publication partner Springer, Academic partners- Maharaja Ranjit Singh Punjab Technical University, Bathinda.





Glimpses of the conference of ETCCS-2021 on 21st-22nd Aug 2021



#### AICTE-ISTE sponsored one-week Online Orientation/Refresher Programme

(PHASE – III)

On

#### **DEVELOPMENTS IN AI & ROBOTICS**

Date of Orientation/ Reresher programe: 19-05-2021-26-05-2021

Collaborative Institutions: All India Council for technical Education& Indian Society for

technical Education ICTE & ISTE

#### **Session 1: Inauguration Ceremony**

Dr. Nimisha Singh welcomed the Chief Guest Prof. Shyam Sundar Pattnaik, Director, NITTTR Chandigarh, Guest of Honor Prof. Vijay D. Vaidya, Executive Secretary, ISTE and Col. B. Venket, Director, Faculty Development Cell, AICTE, New Delhi. She then asked Faculty Development Program Coordinator Dr. Tejinderpal Singh Sarao, Head of Department, MechanicalEngineering to provide details about the program. Later, she asked Prof. Jyoti Bansal, Principal BFCET to extend a vote of thanks to the respected dignitaries.



# Muktsar Road, Bathinda, Punjab (India) AICTE-ISTE SPONSORED ONE WEEK ONLINE ORIENTATION/REFRESHER PROGRAMME (PHASE-III) on \*\*RECENT DEVELOPMENTS IN AI & ROBOTICS\*\* 19.10-2610 MAY 2021 DISTINGUISHED GUESTS & SPEAKERS (INAUGURATION CEREBONY) DISTINGUISHED SPEAKERS PIGE ANABER 11 PIGE ANABER 12 PIGE ANABER 13 PIGE ANABER 13 PIGE ANABER 14 PIGE ANABER 15 PIGE ANABER 15

#### Brochure of FDP on Recent Development in AI & Robotics

Prof. Shyam Sundar Pattnaik, Chief guest of the day inaugurated the event and shared about various ongoing NASA missions namely Mission Shakti, Apollo Program, Drake Equation, etc. In addition to these projects, he also mentioned designing of 6 feet tall robot by NASA for space exploration. He mainly guided the audience not to restrict the research work for limited laboratory facilities but to look upon computational facilities available to the academicians. Prof. Vijay D. Vaidya firstly congratulated BFCET team for their selection in organizing FDP after tough competition between institutions and then illustrated the role of faculty for execution of National Education Policy. He described a Trained Training Program specifically organized for faculty members in the research area of Machine Learning, Artificial Intelligence and Internet of Things (IoT). It would be a free online rigorous training for members shortlisted after the screening test. Col. B. Venket expressed his gratitude to all the organizing committee of BFCET. He was quite enthusiastic about the online program that allows hundreds of participants to join on a common platform.

**Day 2: Thursday, May 20<sup>th</sup>, 2021** 

**Resource Person-**

1. Dr. BS Pabla [NITTR, Chandigarh]



- 2. Dr. Ashish Singla [TIET, Patiala]
- 3. Dr. Prashant Kumar [CSIR-CSIO, Chandigarh]

In first session Prof. (Dr) BS Pabla, Professor Mechanical Engineering department from NITTTR, Chandigarh was the expert. Prof. Pabla enlightened the audience by sharing the vision of NEP 2020 policy. He discussed about the major problems currently faced by the higher education system in our country. Expert shared that higher education commission of India (HECI) will ensure best practices in the educational sector. He discussed that HECI had four verticals National higher education regulatory council (NHERC), National Accreditation Council (NAC), Higher Education Grants Council (HEGC) and General Education Council (GEC). Expert discussed the functions of all four verticals in detail. He said that by year 2040, all higher education institutions (HEIs) shall aim to become multidisciplinary institutions, each of which will aim to have 3,000 or more students and a holistic and multidisciplinary education would aim to develop all capacities ofhuman beings in an integrated manner. He explained that regulatory system of higher education will ensure the distinct functions of regulation, accreditation, funding, and academic standards. Then he answered the queries of participants and concluded the talk. In next Session Dr. Ashish Singla, delivered a talk on recent developments in AI and Robotics. He started his session with his ongoing collaborations for many projects with SUNY USA, UGAV Sweden, DRDO, IIT Ropar, CSIO and IIT Delhi. He explained the mathematical modelling with schematic diagram of cart pendulum system and discussed about the mobile robotics that is his ongoing project in collaboration with IIT Delhi. Third Session was taken by Dr. Prashant Kumar, Senior Scientist CSIR, Chandigarh. the topic for the third session was ethical issues in conduct of research and development. He started the session with what are ethics and the ethics are the moral principles to distinguish between right or wrong. Then he discussed about the classification of ethics that are fundamental ethics, personal ethics, societal ethics, regulatory ethics etc. Then he discussed about the top institutional causes for plagiarism in India that plagiarism in academics is a direct consequence of schooling, pressure to publish etc.



Day 3: Friday, May 21st, 2021 Resource Person –

- 1. Prof. Ashish Singla, TIET, Patiala
- 2. Rishemjit Kaur, Senior Scientist, CSIR Chandigarh.
- 3. Dr. Parvinder Singh, CUP, Bathinda

The topic for the first session was Robotics in Healthcare delivered by Prof. Ashish Singla.. He started the talk by explaining two devices of Healthcare: Surgical Device and Assistive Device. He added his ongoing collaborations with CSIR CSIO Chandigarh for surgical device and University of Gavic, Sweden and DEBEL, Bangalore. Dr Singla discussed about the manipulators used for medical applications by showing basic mechanical structure of MMA modeled in inventor environment along with its prototype developed at CSIR-CSIO, Chandigarh. And also discussed about the exo-skeleton which means providing external support to the body parts of the elderly people so that they can have the better mobility. In last, he answered the queries of participants. The topic for the second session was 'Can we teach morality to machines? Ethics of AI and Robotics delivered by Dr Rishemjit Kaur. First, she discussed about advanced technologies and their concerns. After that she talked about notion of artificial intelligence (AI) Dr. kaur also discussed the history of AI and Asimov's law of robotics. As the session proceeded, she explained the privacy, surveillance in this digital world and privacy preserving techniques. The topic for the third session was "A journey from classical computing to quantum computing: Application in Robotics delvered by Dr. Parvinder Singh. Expert talked about how quantum mechanics (QM) wasoriginated. After that he explained the concept of QM. Quantum algorithms have been discussed by Dr. Singh that run on a quantum computer and achieve a speed-up, or other efficiency improvements over any possible classical algorithm. the end of the session, Dr. Singh discussed about the Quantum machine learning: training the machine to learn from the algorithms implemented to handle data.

Day 4: Monday, May 24<sup>th</sup>, 2021

**Resource Person-**

- 1. Prof. Amandeep Kaur [CUP, Bathinda]
- 2. Prof. Suril Shah [Professor, IIT Jodhpur]
- 3. Dr. Gaurav Kumar [Director, MRCS]



Prof. Amandeep Kaur, delivered her session on 'AI & Robotics in industry'. She explained that AI is the combination of several technologies, which allow software and machines to sense, understand, act and learn on their own. She further explained that industrial production can achievehigher efficiency compared to human labour. Prof. Amandeep also discussed that AI can enable robots to perform tasks that a person would not do. She discussed about the direct benefits of machine learning and AI for manufacturing and the direct benefits were cost reduction, predicting remaining useful life, improved supply chain management. The topic for the second session was 'Robot motion planning' taken by Dr. Suril Shah. He started with the definition of Motion planning that it also known as path planning and it is a computational problem to find a sequence of valid configurations that moves the object from the source to destination. He explained that in robot motion planning two planning were there the first one was the path planning and the other was the trajectory planning. In last ten minutes, he cleared doubts of participants. The topic for the third session was open-source platforms and use cases for real time intelligent applications delivered by Dr. Gaurav Kumar. He started his session with the various open source platforms for real time intelligent applications that were GAZEBO, NODE-RED. Expert taken two sessions on this topic.

Day 5: Tuesday, May 25th, 2021

**Resource Person:** 

- 1. Dr. Gaurav Kumar, Director MRCS
- 2. Dr. Mala Kalra, NITTTR Chandigarh
- 3. Dr. Ritesh Kumar, Senior Scientist, CSIR Chandigarh

Dr. Gaurav Kumar, Director MRCS addressed the audience on the topic "Open Source Platforms and Use Cases for Real Time Intelligent Applications-Part 2". It was a complete hands-on session. He demonstrated the procedure step by step nto access openweathermap.org/api by searching in browser and subscribing to the respective API. Next, he discussed about Message Queuing Telemetry Transport (MQTT) which is a dynamic control and communication protocol. It is used to connect low power devices. He then described Cooja Simulator which is a free open source tool. It is test bed for connecting real sensors. He also briefed about Near Field Communication (NFC) and other protocols like AMQT, COAP, CAP, etc. Dr. Mala Kalra, NITTTR Chandigarh addressed the audience on the topic "Data Analytics using Python". She discussed about Data Science Life Cycle which includes Data Collection, Data Wrangling, Exploratory Data Analysis, Data Modeling and Optimization. She then explained the libraries of Python namely NumPy and Pandas. The expert



then went for hands on session in Python programming language. She used Anaconda Navigator and Jupyter Notebook as Integrated Development Environment (IDE). She taught how to import the libraries of Python, read an input file and play with the array inputs. She trained the audience to make dynamic arrays using certain functions like arrange and random. At the end of the session, she clarified the doubts of participants in an effective manner. Next Dr. Ritesh Kumar, Senior Scientist at CSIR Chandigarh addressed the audience on the topic "Principle Component Analysis: Applications in Machine Learning". Session 3 provided clear insight about applications of Principle Components Analysis (PCA) in machine learning field which are Data Visualization, Data Compression, Noise Reduction, Data Classification, Trend Analysis and FactorAnalysis.

Day 6: Wednesday, May 26th, 2021

Resource Person -

1: - Er Abhishek Gupta, R&D Head, Tevatron Technologies Pvt Ltd

2:- Mr. Amitesh Marwah, State Youth Coordinator, Art of living, Punjab

Er Abhishek Gupta delivered the expert talk on the topic "Challenges and opportunities for AI and Robotics start-ups". He discussed about the artificial intelligence (AI), Machine learning (ML), deep learning (DL) and then about the challenges for deploying AI such as requirement of huge data set, product deployment. He said that different skill set in people (mathematics, robotics, computer science, physics, machine learning algorithm and physics) are required for start-ups of AI and Robotics. As the session proceeded, he described the need of cloud computing. At the end of the session, he discussed about the opportunities of AI & Robotics in various fields such as in military, agriculture. Mr. Amitesh Marwah, delivered his talk on session 'Healing from Breath through the art of living'. He initiated the talk by describing about Body, Breathe, Mind, Intellectual, Memory and happiness. He also added it is the only mind which oscillates between our past and future. Meanwhile, Mr. Amitesh Marwah invited Dr. Vikas Gautam. He told us the importance of Yoga and breathe and what is the science behind them. After that, he invited every participant to do breathing in-out yoga for 35-45 minutes so that it will shifts our energy level high. It was experienced that while doing meditation, we are completely in harmony with our emotions and moreover become aware our emotions. In the last session of the program, quiz took place from 2:00 p.m. to 3:00 p.m. At last, Dr. Tejinder Pal Singh Sarao, FDP coordinator thanked all members of organizing team, participants, resource persons, and management of BFGI for success of programme.



# AICTE-ISTE sponsored one-week online Orientation/Refresher Programme (PHASE-III)

On

#### **DEVELOPMENTS IN AI & ROBOTICS**

Date of Orientation programme: 22-03-2021-27-03-2021

**Collaborative Institutions** :AICTE & ISTE

A 6-day Orientation/Refresher Programme on "RECENT DEVELOPMENTS IN AI & ROBOTICS" sponsored by All India Council of Technical Education and Indian Society of Technical Education was conducted at Baba Farid College of Engineering & Technology, Bathinda from 22<sup>nd</sup> -27<sup>th</sup> March 2021.







## BABA FARID COLLEGE OF ENGINEERING & TECHNOLOGY Muktsar Road, Bathinda, Punjab (India)



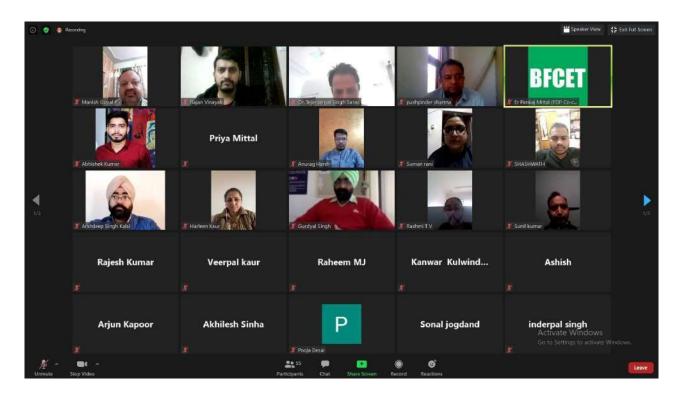
# **Brochure of the Faculty Development Programme**

On the very first day during inauguration of the program, Dr PK Khosla, Executive Director, C-DAC Mohali, Prof. Vijay D. Vaidya, Executive Secretary, ISTE and Col. B. Venket, Director, Faculty Development Cell, AICTE, New Delhi congratulated BFCET team for getting selected to organize online Faculty Development Program on Recent Developments in AI & Robotics. Chief guest Dr Khosla shared his views on future applications of Artificial Intelligent and Robotics. Prof. Vaidya shared about the need of such programs and Col. Venket, Director, FDC AICTE shared about different quality initiatives of AICTE for faculty members of Engineering Institutes in India.



FDP Coordinator Dr Tejinder Pal Singh Sarao shared that BFCET received 365 registrations (267 Faculty members and 98 Research Scholars) from 23 States of India which includes 150 Institutions (Central Universities, BITS, NITTTR and State Technical Universities). Out of these 100 participants were allowed to participate in the program as per guidelines of AICTE- ISTE. Experts from prestigious institutes' such as CSIR-CSIO, Chandigarh, College of Engineering, Pune, IIT Ropar, IIT Kanpur, NITTTR Chandigarh, Central University of Punjab Bathinda, ThaparInstitute of Engineering & Technology Patiala, C-DAC Mohali along with experts from industry delivered lectures to faculty members participating in the orientation.

On last day of FDP, online quiz was conducted, and feedback was taken from participants followed by Valedictory session which was concluded with a brief report and vote of thanks by FDP Coordinator. Chairman Baba Farid Group of Institutes, Dr Gurmeet Singh Dhaliwal congratulated the Principal BFCET and whole organizing team of FDP.



Glimpses of the Faculty Development Programme on 22nd-27th March 2021



# AICTE-ISTE sponsored one-week onlineOrientation/RefresherProgramme (PHASE-III)

On

#### **DEVELOPMENTS IN AI & ROBOTICS**

**Date of orientation programe:** 07-12-2020-12-12-2020

**Collaborative institutions:** AICTE &ISTE

Baba Farid college of Engineering & Technology, Bathinda organized one-week online Faculty development Programme sponsored by AICTE & ISTE on "RECENT DEVELOPMENTS IN AI and ROBOTICS". Principal of BFCET, Dr Manish Goyal welcomed guests in FDP. Followed by Programme coordinator, Dr Tejinder Pal Singh Sarao who thanked and gave information about the programme. Our first guest of honor, **Prof Vijay D. Vaidya**, **Executive Secretary**, **ISTE** congratulated BFCET team for getting selected to organize FDP after tough completion between institutions. Our second guest of honor, **Dr PK Khosla**, **Director**, **C-DAC Mohali** also congratulated team BFCET and shared his views on recent trends in artificial intelligence. **Key note speaker**, **Dr.Valentina E. Balas**, **Professor**, **University of Arad Romania** shared need and importance of AI & Robotics and how companies are looking for digital transformation and even quoted few examples of the same. She congratulated BFCET for organizing FDP and wished good luck and success. Chief guest in inaugural function, **Vice chancellor of MRSPTU**, **Prof. Buta Singh Sidhu** inaugurated the event and shared his ideas and experiences on recent developments of Artificial intelligent and Robotics. He appreciated the rigorous efforts of management toenhance knowledge of faculty members regarding implementation of AI and Robotics.

After inauguration, Professor Asokan, IIT Madras shared his view on Introduction to Robotics and then updated knowledge of participants about recent trends in Robotics. Further Myths and Facts About Robotics were discussed and it was made clear that there was no threat to Jobs due to robotics. Prof. Ekta Sigla, IIT Ropar delivered her talk on robot kinematics. She discussed about advancements in industry robotics.

On second day of FDP, Prof SS Dhami from NITTTR Chandigarh updated knowledge of participants about Sensors and Actuators in Robotics. He discussed working of actuator and controllers with the help of animations. Dr Parvinder Singh of Central University Punjab, Bathinda



delivered his talk on "Quantum Robotics". Expert told that it is an interdisciplinary research area. Expert also shared a documentary video was played on Quantum Computing and Robots and various applications of Quantum Robots were discussed. Prof. BS Pabla, NITTTR Chandigarh, conducted the third session on Artificial Intelligence in Robotics. He mentioned that AI and Robotics both are very powerful areas with wide applications. Expert discussed the importance of AI and Robotics in the current scenario and its uses. He also answered the queries of participants.

On the third day of FDP, Dr. Ashish Singla, addressed the faculty on the Robot Dynamics. Expert discussed the case study of the SCARA Robot, and its validation through MATLAB and at last, he cleared the doubt of the queries raised by faculty. Dr Gaurav, Director of Magma Research and Consultancy Services gave an expert lecture on Machine learning Algorithm and their use in Robotics.

# AICTE-ISTE SPONSORED ONE WEEK ONLINE FACULTY DEVELOPMENT PROGRAMME ON "RECENT DEVELOPMENTS IN AL & ROBOTICS" O7/10-12/10 Decomber 2020 DISTINGUISHED QUESTS & SPEAKERS (INAUGURATION CERTEMONY) DISTINGUISHED SPEAKERS DISTINGUISHED SPEAKERS Prof First Strong Strong Speakers Prof First Strong Speakers Prof First Strong Speakers Prof Assistant Speakers Prof Assis

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**Brochure of the Faculty Development Programme** 



Dr Gaurav started the session describing Arduino and Webcam integration and Image Feature Extraction. Moving forward he mentioned difference between Arduino and raspberry pie. He also mentioned Websites from where Machine learning could be learned. Prof Suril V. Shah, Indian Institute of Technology, Jodhpur delivered talk on "Robot Motion Planning".

On fourth day, in first session Prof Amandeep Kaur of Central University of Punjab, Bathinda delivered Expert Lecture on topic "Computer Vision and Robotics. She described how in Industry 4.0 computers are connected and communicate with each other to ultimately make decisions without human involvement. She discussed the role of computer vision and robotics in this automated decision making. She also shared future research topics in computer vision and robotics.Dr Gaurav Kumar gave an expert lecture on topic "Platforms for Intelligent Robotic Applications". Speaker started with different platforms for Intelligent Robotic Applications providing their website links like https://cyberbotics.com, http://gazebosim.org/, www.ros.org/, https://www.orocos.org/, https://www.mrpt.org/,

https://www.robotarium.gatech.edu. The third session was conducted by Abhishek Gupta, R&D Head- Tevatron Technologies Pvt. Ltd. on the Topic of challenges and opportunities for AI & Robotics startups. Expert updated participants about challenges such as Data security and privacy, and he explained the opportunities such as Real-time environment data capture, understanding, and error reduction, intelligent procurement of materials, delivery management etc.

On fifth day of FDP Prof Ashish Dutta delivered his expert talk on "Biped Locomotion". He shared about legged locomotion and wheel motion through practical examples. He discussed legged structure of animals like mammal, lizard, reptile. He said very high trajectory tracking precision is generally required in order to perform balancing and achieve sufficiently high motion speeds. In next session, Dr. Ashish Singla, shared his views about the control aspects of Robotic Manipulators. He shared about the basis of control system and multifaceted applications of the control system in which he shared about the redundant manipulator, flexible manipulator and under actuated system. In third session, Prof. Ekta Singla, IIT Ropar discussed about "AI and Robotics in Industry 4.0". She talked about SAMARTH UDYOG-BHARAT 4.0. It is an Industry

4.0 initiative of Government of India under its scheme on Enhancement of Competitiveness in Indian Capital Goods Sector. Further she discussed how we are connected with AI in concern to different domains. Then she discussed the connection of Robotics to Industry 4.0 and its future trends. In the end she discussed the importance of Industry 4.0 and also shared the case study related to AI and



# Robotics.

On last sixth day of FDP, Prof. Lalit Mohan delivered his expert lecture on "AI in Smart Cities". He described that a smart machine is a device embedded with machine-to-machine and/or cognitive computing technologies. Prof. Goyal discussed that there are various types of Technical and non-technical Hurdles in smart cities. All basics of AI in Smart Cities was thoroughly covered. At the end of Session future research topics were discussed. Dr. Sohan Chandel, Psychologist and Corporate Trainer, Founder NMET Pvt. Ltd. delivered talk on "EmotionalWellbeing". He illustrated the importance of emotional wellbeing in individual's life especially in this era of social platforms. Dr. Sohan has imparted training to improve the Communication, Interpersonal, Teambuilding and Leadership skills of the employees of, 40+ national and multinational and Govt. organizations, for more than 6000 hrs, in last 11 years, with an excellent feedback and improvement in trainee's personal and professional life. In last session of FDP, Online quiz was conducted and feedback was taken followed by Valedictory session which was concluded by sharing a brief report about FDP by Coordinator of Program, Dr Tejinderpal Singh Sarao. Dr Manish Goyal, Principal Baba Farid College of Engineering & Technology congratulated all the participant's and organizers of the event.







Glimpses of the Faculty Development Programme on 7th - 12th Dec 2020



# **Five Days Faculty Development Programme**

On

# **Cyber Security**

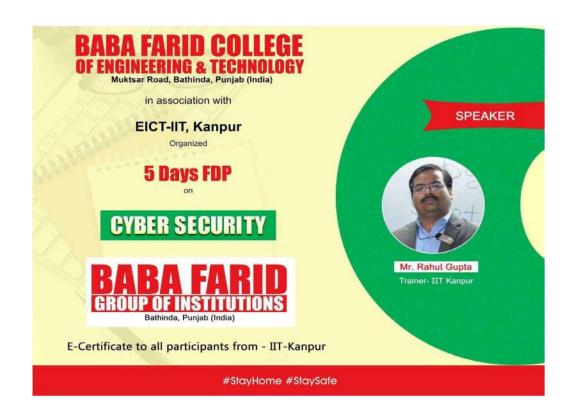
**Date of the Programme:** 04-08-2020-08-08-2020

Collaborative institute: Electronics &ICT Academy -IIT Kanpur

The Department of Computer Science and Engineering (DCSE) at BFCET conducted a Five-Day Faculty Development Programme (FDP) on Cyber Security from 4th to 8th August, 2020. The FDP aimed to provide a comprehensive understanding of Cyber Security, its importance, and the measures that individuals and organizations can take to protect themselves from cyber-attacks. Theevent was welcomed by the Head of the Department of Computer Science and Engineering (CSE) and concluded with a vote of thanks from the Principal of BFCET.

Mr. Rahul Gupta trainer from IIT Kanpur conducted this session for five days. Each new day was anew learning for participants. More than 45 attendees attend this FDP. The complete FDP was online but hands on as the expert shared his screen and step by step asked participants to do hands on also. All participants performed well and asked their queries in parallel. This Course significantly benefitted security professionals, security officers, auditors, site administrators, web programmers and anyone who was concerned about the integrity of the Network infrastructure.





#### **Brochure of Workshop**

#### Day1:

The FDP included a series of sessions by Mr. Rahul Gupta, an expert in the field of CyberSecurity. The first day of the programme covered the basics of Cyber Security and its significance in today's world. He discussed the various types of cyber-attacks, such as phishing, malware, ransom ware, and social engineering, among others. He also explained the importance of cyber hygiene and the need for organizations and individuals to take preventive measures to protect themselves from cyber-attacks.

#### Day2:

The second day of the programme focused on the tools and techniques that are available to individuals and organizations to safeguard them from cyber-attacks. Mr. Rahul Gupta discussed the importance of implementing strong passwords, two-factor authentication, and regular software updates to protect against cyber-attacks. He also highlighted the need for organizations to implement a strong cyber security policy that includes regular employee training and awareness programs.



# Day3:

On the third day of the programme, Mr. Rahul Gupta discussed the role of firewalls, intrusion detection and prevention systems, and antivirus software in Cyber Security. He also highlighted the importance of regularly monitoring and analyzing network traffic to identify potential security threats and take necessary action to prevent them.

#### Day4:

The fourth day of the programme focused on cloud security, mobile device security, and social media security. Mr. Gupta explained the various security challenges associated with cloud computing, mobile devices, and social media platforms. He also discussed the best practices that individuals and organizations can follow to protect their data and systems from cyber threats.

# Day5:

On the final day of the programme, the participants were given hands-on training on Cyber Security tools and techniques. They were provided with a simulated environment to learn about cyber-attacks and how to defend against them. The interactive session allowed the participants to clarify their doubts and queries regarding Cyber Security.



Glimpses of the Faculty Development Programme on 4th-8th Aug 2020



# Entrepreneurship Awareness Camp (2019-2020) Sponsored by Department of Science and Technology (DST), Government of India

**Date of Camp**: 25-09-2019 - 27-09-2019

Number of students Participated: 125

Name of Resource Persons: Mr. Paramjit Singh, Principal Director, RCED, Chandigarh

Er Pratibha Singh, IIFPT, Thanjavur, Tamil Nadu

Dr. Manish Bansal, Dean of Entrepreneurship Development,

MIMIT, Malout

Dr. A.K. Singh, CEO, ICAR-NDRI, Karnal

Name of Collaborative Institution: Department of Science and Technology, Government of India

A three-day Entrepreneurship Awareness Camp (EAC) was conducted by Baba Farid College of Engineering and Technology in collaboration with the Baba Farid School of Entrepreneurship from 25-27 September 2019. This camp was sponsored by the Department of Science and Technology (DST), Government of India. A total of 125 students of variousstreams participated in this camp out of which 18 students were from BFCET. This camp was organized to create awareness among students about opening new Startups along with their education. The camp started with the inaugural ceremony where National Awardee Mr. Paramjit Singh, Principal Director, Regional Centre For Entrepreneurship Development, Chandigarh highlighted the merits of pursuing entrepreneurship as a career option. Mr. Singh added that he was confident that students had brilliant ideas but it was the fear that held them back. He said that this fear creeps from the very fact that as a starter one lacks knowledge of how to get started.





#### **Brochure of Entrepreneurship week**

Er Pratibha Singh, IIFPT, Thanjavur, Tamil Nadu, and Dr. Manish Bansal, Dean of Entrepreneurship Development, MIMIT, Malout, motivated the students to pursue their ideas and follow the path of entrepreneurship. Er. Pratibha Singh of IIFPT, Thanjavur, Tamil Nadu also shared her views on starting new ventures.

On The next day of camp, different sessions were conducted based on the themes of the Need for Entrepreneurship, Entrepreneurship as a career option, and Entrepreneurial Qualities respectively. Dr. A.K. Singh, CEO of ICAR-NDRI, Karnal talked about various schemes offered by Banks & Govt. to startups and entrepreneurs. He discussed the Marketing strategy for the new Startup and told about the various schemes opened by the Government such as Startup India,



Standup India, and Make in India, etc.

The students attended the camp with full zeal and enthusiasm. Dr. Gurmeet Singh Dhaliwal, Chairman, BFCET expresses a deep sense of gratitude to DST, Govt. of India, for sanctioning the EAC and appreciated the efforts of faculty for creating an entrepreneurial ecosystem in the campus and ensuring full support in the future.



Glimpses of Entrepreneurship Awareness Camp 25th-29th Sept 2017



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# **Seminar on Entrepreneurship**

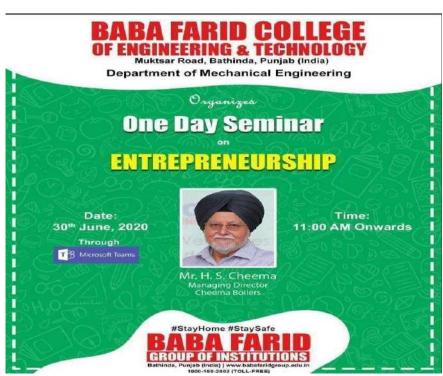
Date of Seminar: 30-06-2020

**Program:** Baba Farid College of Engineering and Technology

**Total Number of Participants: 37** 

Name of Resource Person: Mr. H S Cheema, MD, Cheema Boiler

A one day seminar on ENTREPRENEURSHIP was organized by the Department of Mechanical Engineering, Baba Farid College of Engineering and Technology. In this seminar, Mr. H S Cheema, MD, Cheema Boilers was the resource person and he was welcomed by Dr. T. P. S Sarao, Head of the Department of Mechanical Engineering. Er. Gaurav Garg, AP of the Department of Mechanical Engineering was coordinator of this workshop. In this workshop, Mr. Cheema shared his personal experience regarding how he became an entrepreneur by facing a lot of problems and resistance from family and other nearby people. Mr. H S Cheema shared the steps to the students how they become successful entrepreneurs in any field. The session was excellent and in the end Mr. Cheema cleared the doubts of the students by answering their queries. Students shared their feedback and requested for similar types of workshops in the future. At last Dr. Sarao gave the vote of thanks to the resource person for sharing a wonderful experience with the faculty and students.



Invitation Poster of One day Seminar on Entrepreneurship





A glimpse of one day seminar on entrepreneurship on 30th June 2020



#### Webinar on Environmental Impact Assessment Process in India

Date of Webinar: 29th April 2020

Program: Baba Farid College of Engineering and Technology

No. of Students participated: 50

Name of Resource Person: Mr Sachin Khairkar, Environmental Professional.

Baba Farid College of Engineering and Technology organized an online Webinar on "Environmental Impact Assessment Process in India" on the Zoom platform for Civil Engineering graduates. It is quintessential for civil engineering students to know and learn about industry experience from expertise for their bright future careers in the field of the public and private sectors. Mr. Sachin Khairkar was welcomed by Er. Tanu, HoD Civil Engineering.



Brochure of the Webinar on EIA



Mr Sachin unfolded the webinar with the present scenario of Civil Engineering. He taught students about the need for EIA (Environmental Impact Assessment) for the establishment of any small-scale or large- scale industry. It is very important for students to learn the EIA process apart from their curriculum. In continuation, expertise introduced the students to the importance of EIA (Environmental Impact Assessment), detailing of steps involved in EIA, the process of EIA and the journey of EIA in India. He also shared details of current projects and the latest practices undergoing in their enterprise and briefedthe students about career growth and opportunities as a Consultant and Designer in Civil Engineering.



Glimpses of the Webinar



It was a very interactive session with questions and answers, students understood the importance of EIA, its legal requirements for new projects as well as for extension of pre-existing projects. They also asked him about the latest techniques and practices in relative field. Special Thanks to Dr B.R. Yadav (Scientist at NEERI) for attending and organising an expert lecture for us. Hence experts shared their valuable knowledge and experience with us. Er. Priya Mittal concluded the webinar by presenting a vote of thanks



#### Workshop on SOLIDWORKS

**Date of Workshop:** 2 March 2020

Program: Baba Farid College of Engineering & Tchnology Bathinda

No. of Students participated: 30

Name of Resource Person: Er. Vinod Kumar, Assistant Professor, Punjab State Aeronautical

**Engineering College** 

#### **Event Description:**

The event started on the 2nd of March and mainly focused on the need for 3D modeling and simulation in the present engineering world. Since everything is getting its feet found in computerized technology, it's necessary for the new engineering students to get used to the upcoming technology, which primarily includes the learning of different software. Since SolidWorks had to offer a lot of features, in a day workshop, the main focus was to understand the concept of the following features.

#### **Highlighted Features:**

#### **Sketching:**

To make something or present your idea the basic thing that you do is sketch, SolidWorks allows you to do 2D, and 3D sketching with enhanced features, SolidWorks allows you to use different commands in your different stages of sketching,

- Trim and Extend
- Dimensioning
- Offset

#### Different line and shape commands:

#### **Part Modeling:**

In this section, participants were given knowledge about modeling a part or component of any machinery. Students were made familiar with the terms and commands that are necessary to make apart of SolidWorks. Students were given the concept of extrude features, boss feature, cut feature, filet and revolve features.



#### **Assembly:**

SolidWorks provides this ease of making parts according to the specified dimensions so that testing of individual parts is to be done before assembling them. In assembly, students were made aware of how to insert a new part in assembly mate features, assembly features, and advanced mate.

#### **Sheet Metal Work:**

SOLIDWORKS 3D allows you to quickly create sheet metal part designs using a simple design process, saving you time and development costs, thanks to specific sheet metal features.

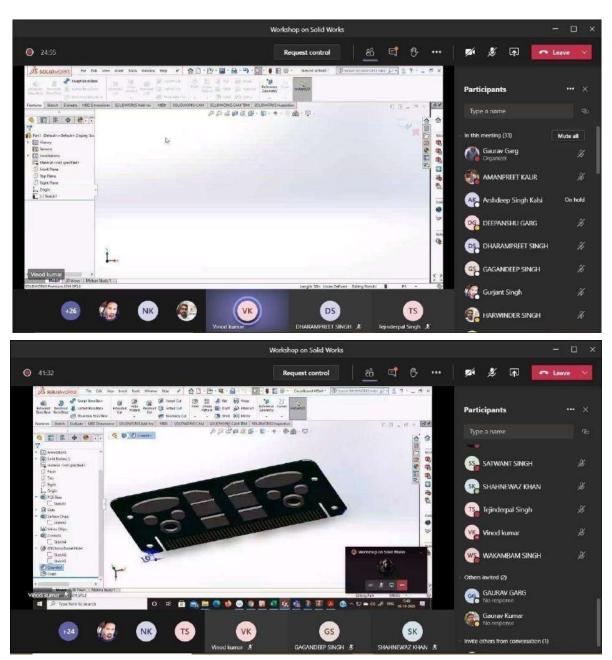
#### **Benefits of such workshops:**

- 1. Builds exposure and makes students think differently.
- 2. Makes students understand the core values of their field.
- 3. Builds a practical mindset.
- 4. Improves their technical skills to a great extent so that they can get expertise in the required area.
- 5. Make students innovative and creative in their approach and to develop new ideas that would be applicable in the near future.



**Brochure of the Workshop on Solid Works** 





Glimpses of the Webinar



# ISTE & AICTE SPONSORED "OUTCOME BASED EDUCATION TEACHING LEARNING IN DIGITAL AGE"

Date of FDP: 16 -07-2018- 21-07-2018

Collaborative institutions: All India Council of Technical Education and Indian Society

of Technical Education

A 6-days Faculty Development Programme on "Outcome Based Education-Teaching Learning Skills in Digital Age" sponsored by All India Council of Technical Education and Indian Society of Technical Education was conducted at Baba Farid College of Engineering &Technology, Bathinda from 16<sup>th</sup> to 21<sup>st</sup> July, 2018. More than 50 faculty members from various regions of country participated in this Faculty Development Programme. The main topics discussed in the programme were related to Outcome Based Education (OBE), Accreditation requirements, teaching learning skills, Bloom's Taxonomy, OBE Curriculum, E-learning with digital experiences, Industry-institute interface, mentoring of students, Art of living and filling of Self-Assessment Report for NBA Accreditation etc.



Brochure of FDP on outcome based education-Teaching learning skills in Digital Age



# **Day 1: Monday, July 16, 2018**

#### Resource Person -

- 1. Dr. Mohan Paul Singh Isher (Vice Chancellor, MRSPTU Bathinda)
- 2. Dr. P.S. Grover, KIIT Group of College, Gurgaon

**1stSession:** -The Chief Guest **Dr. Mohan Paul Singh Isher**, Hon'ble Vice Chancellor, Maharaja Ranjit Singh Punjab Technical University, Bathinda (Punjab) made the occasion graceful with his esteemed presence and evocative inaugural address on "Outcome Based Education- Teaching Learning skills in Digital Age". During the inaugural session, Dr. Tejinder Pal Singh Sarao (Coordinator FDP) briefed the importance of Outcome based education to all participants. Er. Manish Goyal (Asst. Director Academics) delivered welcome speech to all the faculty members as well as delegates.



**Session2**<sup>nd</sup>**and 3**<sup>rd</sup>**-** Dr. P.S. Grover, Director, KIIT Group of College, Gurgaon, discussed issues related to Teaching-learning and Outcome Based Education in technical institutes. He discussed the difference between our present education system and need of outcome-based education system.

**Session 4 -** Dr. P.S. Grover, delivered a talk on Vision and Mission of technical Institutes. He also discussed graduate attributes for engineering students and programme educational objectives (PEOs) as per NBA.

# **Day 2: Tuesday, July 17, 2018**

#### Resource Person -

Dr. P.S. Grover, KIIT Group of College, Gurgaon

**Session 1<sup>st</sup> and 2<sup>nd</sup>** –Dr. P.S. Grover, in this session discussed Program Outcomes (POs) and Course Outcomes (COs). Sessions were concluded by group discussion and feedback session associated with the topics.



Session 3<sup>rd</sup> and 4<sup>th</sup> -Dr. P.S. Grover discussed

Development of Programme Curriculum for Outcome Based Education. He cleared all the quarries of participants regarding assessment tools and methods in context of OBE

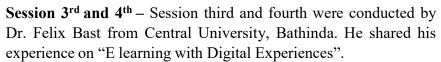


#### Day 3: Wednesday, July 18, 2018

#### Resource Person -

- 1. Dr. Ajay Kakar (Thaper University, Patiala)
- 2. Dr. Felix Bast, (Central University of Punjab, Bathinda, Punjab)

**Session 1**<sup>st</sup> and 2<sup>nd</sup> -were conducted by Dr. Ajay Kakar from Thaper University Patiala, Dr. Kakar exchanged his views on different Taxonomies and their relevance to educational objectives with his power point presentation. He elaborated Bloom's Taxonomy in detail with examples.



He shared concepts and tools involved with e-learning that are used as part of non-formal and life-long learning. An easy to adopt e-learning framework called 'Site Box' was discussed. Dr Felix discussed concept of MOOCs, with an emphasize on how MOOCs transforms digital education landscapes. He covered salient features of UGC-SWAYAM in-depth. He covered how MOOCs facilitate hybrid model of pedagogy, also called 'flip class', as well as Artificial Intelligence-assisted latest concept of PersonalizedEducation.





#### Dav4: Thursday, July 19, 2018

#### Resource Person -

- 1. Dr. Jubilee Padmanabhan, (Central University of Punjab, Bathinda, Punjab)
- 2. Dr. J.S. Saini, (NITTTR, Chandigarh)
- 3. Dr. Sesadeba Pany, (Central University of Punjab, Bathinda, Punjab)

**Session 1**–Dr. Jubilee Padmanabhan from Central University of Punjabshared"Activity Based Teaching and Learning process" where she delivered live demonstration on activity-based education through audience activity.





Session 2—was delivered by Dr.J.S. Saini, from NITTTR, Chandigarh. He shared his experience on "Learning through Industrial Exposure". Dr. Saini covered how to implement the technical-teaching methodology via industrial tie-ups and Project based learning. He enlightened faculty members regarding industry- academia collaboration with his widened experience.

**Session 3 and 4-** was conducted by Dr. Sesadeba Pany from Central University Bathinda, Dr. Pany Shared his experience on "Effective Teaching and Students Feedback" throughout the session he cleared all the queries of the faculty related to effective teaching and students feedback.

# **Day 5: Friday, July 20, 2018**

#### Resource Person -

- 1. Session on Art of Living by Dr. Amit Taneja and Mr. Sumit Arora
- 2. Dr. Sohan Chandel, Psychologist

**Session 1 and 2** – Session 1<sup>st</sup> and 2<sup>nd</sup> were taken by Dr. Amit Taneja and Mr. Sumit Arora from Art of living. They provided knowledge on the topic connected to "Sudarshan Kriya" and enlightened the faculty with their various yoga techniques through live demonstration which really helped participants to calm their mind and body in stressful working environment.

**Session 3 and 4-**werepresented by Dr.Sohan Chandel (Psychologist). Dr. Chandel delivered his session on topic "New Age Mentoring and attending skills for the faculty on the psychological standpoint". He discussed important aspects of working environment, problems faced by the teachers and its psychological solutions.

In his fourth session Dr.Sohan Chandel provided a live psychological activity among participants to demonstrate his psychological aspects.



# 6<sup>th</sup> Day: Saturday, July 21, 2018

#### Resource Person -

1. Dr. Sandeep Grover (YMCA Faridabad)

**Session 1 and 2** – were started with the talk of Dr. Sandeep Grover from YMCA Faridabad. He delivered his talk on the topic "Discussion on SAR" where he conveyed valuable information on several accreditations like NBA (national board of accreditation) and NAAC (national assessment and accreditation council) to audience.



#### **Valedictory Session**

Er. Rupinder Singh Sekhon, General Manager (Verka Milk Plant, Bathinda) was the Chief Guest at the valedictory Session. In his interaction, Er. Rupinder Singh shared his valuable views about industrial- institutional relationships. He also mentioned the problems faced by the industries due to the lack of futuristic and advanced knowledge of students. Despite these, he shared valuable information about the industrial environment to faculty members.



This programme has proved as a fruitful experience for Organizers, experts as well as participants. Dr. TejinderPal Singh Sarao (Coordinator of FDP and Head, Department of Mechanical Engineering) shared the detailed report of the FDP in valedictory session.





Er. Manish Goyal (Asst. Director Academics) delivered vote of thanks to all the dignitaries and participants who made this faculty development programme a big Success. He congratulates all the faculty members for successful completion of the faculty development programme.





## DST & EDI, GOVT.OF INDIA Sponsored ENTERPRENEURSHIP CAMP

**Collaborative Institutions:** Department of Science & technology & Enterprenurship Development institute, GOVT OF INDIA

Baba Farid College of Engineering & Technology in collaboration with Industry-Interactive Entrepreneurship Cell, BFGI organised three days Entrepreneurship Awareness Camp (EAC). This is the 2<sup>nd</sup> camp organized at BFGI Campus in the last 15 days which is sponsored by Department of Science and Technology (DST), Government of India with aim ofbuilding the entrepreneurship ecosystem in the country from the grass root level. Students of engineering stream participated in this camp with full zeal and enthusiasm.



**Brochure for Entrepreneurship Awareness Camp** 



The camp started with the inaugural ceremony where Mr. Balbir Singh, National Accredited Trainer and Former VicePresident NITCON Ltd. motivated the students to pursue their ideas and follow the path of entrepreneurship. Mr. Singh added that he was confident that students had brilliant ideas but it was the fear that holds them back. He said that this fear creeps from the very fact that as starters one lacks knowledge of how to get start. On The first day of camp different sessions were conducted based on the themes of Need for Entrepreneurship, Entrepreneurship as a career option and Entrepreneurial Qualities respectively.



Second day resource person for the 1<sup>st</sup> session was Ms. Mandeep Kaur Sidhu from Simbacart online services pvt. Ltd. gave insights of her entrepreneurial journey. Ms. Sidhu started Simbacart with an aim to uplift the rural in terms of skill development and generating employment. She encouraged the students to follow their passion with honesty and told that anybody can reach the skies with determination and perseverance.

Mr. Navdeep Singh Gill, Product & AI Architect, Chandigarh talked about the emerging technologies of 21<sup>st</sup> century such as AI, ML and data science to aware the students about various career and entrepreneurial opportunities available in these fields. He also told about therole of Angel Investors and Venture Capitalists to run the Startup.

Mr Ashish Bansal, Branch Manager from Punjab & Sind Bank talked about variousschemes offered by Banks & Govt. to startups and entrepreneurs. He discussed about the Marketing strategy for the new Startup and told about the various schemes opened by the Government such as Startup India, Standup India and Make in India etc. He also shared the different subsidy



schemes of the Banks for the Entrepreneurs. Further he told the students about documents and all other ancillaries required for Bank Financing.



# Glimpses of the ENTERPRENEURSHIP CAMP

An industrial visit was also organized to P.P. Industries, Bathinda which is a well-known for manufacturing Single phase Oil filled Distribution Transformers (5KVA to 100KVA). This industry is an ISO 9001:2008 certified which has latest manufacturing facilities. During the visit students also got the chance to know about the manufacturing techniques and materials for make Single Phase Transformers. It was a great experience for all the students to be able to see the manufacturing process of Distribution Transformers.

Dr Gurmeet Singh Dhaliwal, Chairman, BFGI expresses the deep sense of gratitude to DST, Govt. of India for sanctioning the EAC and appreciated the efforts of faculty of BFCET for creating an entrepreneurial ecosystem in the campus and ensured full support in future. He told that this camp aims at creating awareness among students about opening new Startups along with their education.





Glimpses of the ENTERPRENEURSHIP CAMP



Geotagged photographs of the same location as on dated 13-06-2023



# **Report of International Conference on Intelligent Machines (ICIMs 19)**

**Date of Conferences**: 15-03-2019-16-03-2019

Collaborative Institutions: Council of Scientific & Industrial Research Indian society for Technical

Education & Springer

Two days International Conference on "Intelligent Machines" (ICIMs 19) was organized by Baba Farid College of Engineering & Technology, Bathinda in technical collaboration with IETE and Springer during 15th-16th March 2019. The International conference was sponsored by Council of Scientific & Industrial Research (CSIR), The Indian Society for Technical Education (ISTE) and Maharaja Ranjit Singh Punjab Technical University (MRSPTU), Bathinda The main objective of the conference was to provide international platform to share the new advancements and innovations in the Artificial Intelligence (AI), Robotics and Internet of Things (IoT). The three tracks of the conference covered the latest technologies being used worldwide in the 21st century and Industry 4.0. ICIMs 19 provided a spectrum of opportunity to share new concepts amongst the technologist, industrialists, researchers and students (from research areas of AI, Robotics and IoT).

Prof. Pardeep Kaura, Deputy Director, Academics, Baba Farid group of Institutes (BFGI) welcomed all renowned guests and dignitaries during the inauguration of the conference. Dr. P K Khosla, Executive Director, C-DAC Mohali, India was the chief guest. He shared his ideas on innovation and knowledge clusters and also described the importance of AI which is a mean of perceiving, learning and problem solving. He gave a brief out of various projects going on in CDAC Mohali. He described the importance of different AI algorithms.

In the plenary session, Dr. Valentina E. Balas, Professor, Automation & Applied Informatics, University of Arad, Romania delivered a keynote address. She gave an outstanding talk on quantum computing. Dr. Narendra S. Chaudhary, Professor, IIT Indore shared his views on the IT revolution in the world and he added that India is leading in the field of information technology because of the contribution of young minds. He discussed how IoT has changed our life and also described its importance in health care, agriculture, education and disaster management. Finally he shared how intelligent algorithms can control the robots. Dr. Mamta Mittal, Associate Professor, G B Pant Government Engineering College, New Delhi, another speaker, discussed the present technical education scenario and laid emphasis on providing practical exposure to students rather than concentration on theoretical knowledge.



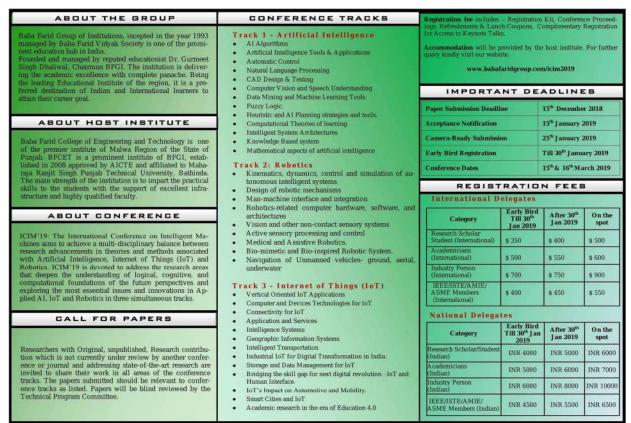


**Glimpse of International Conference on Intelligent Machines** 

Prof. (Dr.) Jasbir Singh Hundal, Registrar MRSPTU, Bathinda was the Chief Guest of the Valedictory Ceremony while Dr. Valentina E. Balas, Professor, Automation & Applied Informatics, University of Arad, Romania was the Guest of Honour. Principal BFCET, Dr. Manish Goyal welcomed all the dignitaries at the valedictory ceremony. He shared that BFGI always believes in imparting core values of technical education and skills by focusing on bridging the gap between knowledge based education to competency based education. He said that BFGI has launched the concept of University 4.0 through which we envisage to shift the focus of teaching-learning from teacher centered to learner centered learning.







**Brochure of International Conference on Intelligent Machines** 



Convener of Conference, Dr. Tejinder Pal Singh Sarao read the report of the conference and congratulated everyone for making it a successful conference. He said that, "We received 296 research papers from within India & abroad out of these 116 papers were selected for presentations. During 2 days the conference witnessed 10 technical sessions. Large number of delegates from IITs, NITs and other esteemed universities and institutions across India participated with full zeal and enthusiasm. He acknowledged the important contributions of all conference participants and thanked all speakers for sparing their time and effort they took to share their expertise with the audience in conference.

Prof. Jasbir Singh Hundal shared that, "I feel glad to be invited by BFGI at this grand event as I like all the efforts made by this institution to stand up on global standards." He congratulated BFCET for organizing such a productive and knowledgeable conference. He shared his views about the importance of research & development. He discussed new areas in which we should research. He stressed that jobs are available but students lack desired skills leading to unemployability. So, educational institutes should work on the track of producing skilled manpower by imparting quality education to them which is directly or indirectly related with research & development. He shared the importance of publications, projects, patents, and citations. He wished & congratulated BFCET for the grand success of the conference.

On this occasion, students of BFCET also organized cultural events for the entertainment of the delegates. Management of BFGI honored the Chief Guest & other dignitaries of the event. Dr. Jayoti Bansal, Vice Principal, BFCET delivered 'Vote of Thanks' & thanked all the dignitaries, participants and the organizing team. Finally the conference winded up by honoring the delegates for spending their precious time and sharing the knowledge and experience with participants. Dr Gurmeet Singh Dhaliwal, Chairman BFGI congratulated the entire Team of BFCET for the successful organization of the international Conference.



# 2-day meet on intelligent machines begins at BFGI

#### BATHINDA, MARCH 15

The two-day International Conference on Intelligent Machines' started at the Baba Farid College of Engineering and Technology in collaboration with Springer, a global publishing company, today.

The conference is aimed at a multi-disciplinary balance between research advancements in theories and methods associated with artificial intelligence, internet of things (IoT) and robotics.

Dr PK Khosla, executive director, C-DAC, Mohali, was the chief guest at the inaugural function of the conference while Dr Valentina E Balas. professor, Automation and Applied Informatics, University of Arad Romania, was the guest of honour. The keynote speakers were Dr Narendra Chaudhari, professor (HAG),



Dignitaries during the conference in Bathinda on Friday. TRIBUNE PHOTO

Computer Science and Engineering, IIT, Indore.

Dr Pardeep Kaura, deputy director, academics, BFGI, welcomed all renowned guests and dignitaries to the event and said the BFGI was working aggressively on research and innovation.

He said the aim of the conference was to give a boost to researchers, engineers and practitioners who were interested in theory and applications under artificial intelligence.

Dr Chaudhari shared his views on IT revolution in the world and said India was leading in the field of information technology and discussed about how the IoT has changed our lives. He also discussed challenges and limitations of the IT revolution.

Dr Mamta Mittal, associate professor, GB Panth, Government Engineering College, gent machines. She also talked about 3 L's - look, listen and learn and motivated researchers to sharpen knowledge, skill and ideas.

During the inaugural function of the conference, a book on 'collection of research papers' of the conference was released by the dignitaries.

Later, the BFGI signed seven MOUs with the University of Arad, Romania, Sportking Industries, Bathinda, Multi-Melt Industries, Rampura Phul, Council of Engineers and Valuers, Jalandhar, Enovation Lab LLP Chandigarh. Elysian Corporation, Mohali, and Stelco Industries Limited, Rampura Phul, Six More MoUs will be signed during the valedictory function of the conference.

Over 20 international and 600 students will be participating in the conference.

Bathinda Cribune Sat, 16 March 2019 https://epaper.tribuneindia.com/c/37647077

# meet on Intelligent Machines ends

TRIBUNE NEWS SERVICE

#### BATHINDA, MARCH 17

An international conference "Intellgent Machines" organised by Baba Farid College of Engineering & Technology in collaboration with concluded Springer', BFGI on Sunday.

The conference was sponsored by the CSIR, ISTE and MRSPTU, Bathinda. The aim was to encourage discussion on cutting-edge research and practical applications of Intelligent Machines. The 3 tracks of the conference Artificial Intelligence, Robotics and Internet of Things (IoT) are the latest technologies being used worldwide in the 21st century and Industry 4.0.

Prof (Dr) Jasbir Singh Hundal, dean (R&D) and MRSPTU. registrar. Bathinda, was the chief guest of the valedictory ceremony while Dr Valentina E Balas, professor, Automation & Applied Informatics, University of Arad, Romania, and Dr Mamta Mittal, Associate Professor, GB Pant Government Engineering College, New Del-



Students pose for a photograph after being honoured during the international conference organised by Baba Farid College of Engineering & Technology in Bathinda on Sunday. TRIBUNE РНОТО

hi, were present as the guests of honour.

Chief guest Prof (Dr) Jasbir Singh Hundal said, "I feel glad to be invited by BFGI at this grand event as I like all the efforts made by this institution to stand up on global standards."

He there were a number of jobs available in India, but students did not have the skills to match the needs of industry. This is the main

reason behind unemployment. So, educational institutes should work in such a way as to produce skilled manpower by imparting quality education to them which is directly or indirectly related with research and development

Dr Valentina E Balas, professor, automation & applied informatics, University of Arad, Romania, gave an outstanding presentation about 'Nano Technology, Fizzy Methodolgy, Artificial Pencreis Quantum Computing.

Dr Mamta Mittal, Associate Professor, GB Pant Government Engineering College, New Delhi, discussed the present technical education scenario and laid emphasis on providing practical exposure to students rather than concentration on theoretical knowledge

Bathinda Cribune Mon. 18 March 2019 https://epaper.tribuneindia.com/c/37710344





## Workshop on Digital Marketing and its importance for Business and Entrepreneurship

**Date:** 23-02-2018

Number of students participated: 27

Name of Resource Person: Mr. Pankaj

Name of Collaborative Institutions: SkyCon Technologies, Bathinda

The Department of Information Technology (IT), Baba Farid College of Engineering and Technology successfully organized a workshop on "Digital Marketing and its importance for Business and Entrepreneurship" in association with SkyCon Technologies, Bathinda. Mr. Pankaj was cordially welcomed by the Head of the Department of IT and a total of 27 students of the 4th and 6th semesters attended this workshop.

The workshop was organized to describe the implementation of digital marketing in business to enhance resources by making it cost-effective. Mr. Pankaj from SkyCon Technologies was the keynote speaker of the workshop. He described the importance of digital marketing in achieving the goal in the business sector by managing time and money.



# BABA FARID COLLEGE OF ENGINEERING & TECHNOLOGY



#### Workshop

on

#### Digital Marketing and its importance for Business and Entrepreneurship

in collaboration with SkyCon Technologies, Bathinda

Name of Resource Person:

Mr. Pankaj

Date: 23-02-2018





#### **Brochure of Workshop**

Workshop was organized successfully. Mr. Pankaj explained Digital marketing and its valuable role in shaping e-commerce in today's world. He also discussed how it positively impacts businesses. In the end, the speaker was thanked for his valuable knowledge sharing. The head of the department gave a thanks speech for the expert.



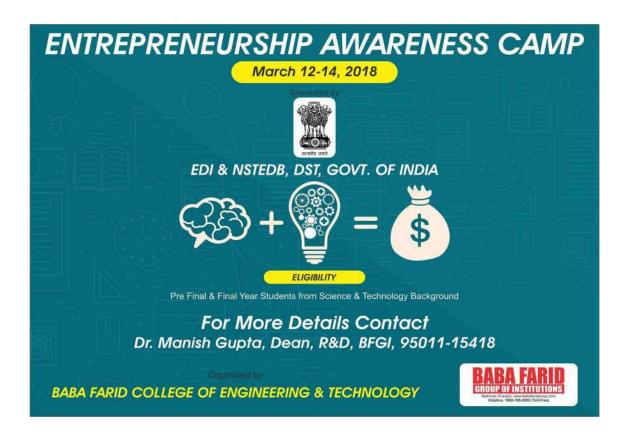
Workshop on Digital Marketing and its importance for Business and Entrepreneurship



# ENTERPRENEURSHIP AWARENESS CAMP Sponsored By

#### EDI, NSTED, DST GOVT.OF INDIA

Baba Farid Group of Institutions through its Industry-Interactive Entrepreneurship Cell has organised 3-days Entrepreneurship Awareness Camp to give its students the specialized disregard of the Entrepreneurship and Start ups. This camp was supported by Department of Science and Technology (DST) and Entrepreneurship Development Institute (EDI), Government of India from 12<sup>th</sup> to 14<sup>th</sup> March 2018. This camp also aims at creating awareness among participants about various facets of entrepreneurship



#### Brochure on Entrepreneurship awareness camp

The first day of the Entrepreneurship Awareness Camp saw an extraordinary launch with a famous speaker Mr Balbir Singh, Vice President, NITCON, Chandigarh. He has an immense involvement with preparing for Entrepreneurship to students, dropouts and industrialists for around 30-40 years. The first day of camp was directed in three distinct meetings dependent on the subjects of "Requirement for



Entrepreneurship", "Business enterprise as a lifelong alternative" and "Pioneering Qualities" individually. While highlighting the merits of pursuing entrepreneurship as career option Mr Singh added, he was confident that students had brilliant ideas but it was the fear that holds them back. He said that this fear creeps from the very fact that as starters one lacks knowledge of how to get start.



Glimpse of Entrepreneurship awareness camp on 12-14 March 2018



Geotagged photograph of the same location on dated 13-6-2023



On the Second day of the Entrepreneurship Awareness camp asset individual for the first meeting was Mr R.K Gupta, former Manager State Bank of Patiala. In his talk he informed the students concerning archives and all different ancillaries required for Bank Financing. He likewise shared the diverse appropriation plans of the Banks for the Entrepreneurs.

Mr P.K. Bhandari is a fruitful business visionary of Malwa region. He portrayed his excursion and battles to rouse students to turn into a business visionary. Rousing students Mr. Bhandariin his talk portrayed that conventional training just give us living yet self-instruction make our fortune. He told the estimation of skip back throughout everyday life. He recommended building up the propensity to make day by day dairy and to alter the concentration to make thought and work on it. Further Mr Bhandari sharing his experience said Entrepreneurship has next to no to do with cash. It is instead an attitude and a way of thinking. It goes beyond simply starting a company. In other words not all people who start their own organizations can necessarily be categorized as entrepreneurs. Entrepreneurs challenge assumptions, recognize opportunities in periods of change, reveal patterns where others see chaos and mobilize limited resource to achieve the objective.

Resource Person for the third Session was Mr Amit Bansal, Chartered Accountant. He motivated the students and told that failure is part of entrepreneurship. Good entrepreneur must have the appetite to take risk. He further said today companies hire the person who had failed in their start-up as they know all the integrities required to run a successful venture. He discussed about the meaning of Entity and their role. He told about the structure, Benefits, role and functions of the three Entities: Private Limited Company; a Registered Partnership Firm; a Limited Liability Partnership. Mr Bansal described the students about the flagship program run by Government of India that is start up India and told different tax-exemptions given to the entities covered under Start up India. He also told about the role of Angel Investors and Venture Capitalists to run the Start up

On the last day of the event there was an industrial visit to Sportking Industries which is a well-known brand in the Textile Industry where the officials of Sportking Industries described and showed the working of Industry to the students. During the visit students also got the chance to interact with President of Mr Shiv Kumar Sharma Sportking.



The students attended the camp with full zeal and enthusiasm. Dr Gurmeet Singh Dhaliwal appreciated the efforts of Industry-Interactive Entrepreneurship Cell for creating an entrepreneurial ecosystem in the campus and ensured full support to the IIEC in future.





**Visit to Sportking Industries** 



# Seminar on Entrepreneurship: Steep Rise of Entrepreneurship in Generation of Solar Energy

**Date: 27-03-2018** 

**Number of students Participated: 47** 

Name of Resource Person: Mr. S.K. Verma, Plant Head.

Name of Collaborative Institution: Adani Solar Plant

A Seminar on Entrepreneurship: Steep Rise of Entrepreneurship in Generation of Solar Energy was organized by the Department of Electrical Engineering, Baba Farid College of Engineering and Technology. 47 students from the EE department attended the Seminar. Mr. S.K. Verma, Plant Head, Adani Solar Plant was welcomed by Er. Harsimran Singh, Head of Department. The main objective of this seminar on entrepreneurship was to prepare future engineers as entrepreneurs.



#### **Brochure of Seminar**

In the beginning, Mr. S.K. Verma from Adani Solar Plant gave a brief outline of the work of the plant and discussed the scope in the coming years. He explained that Solar technology can



be broadly classified as Active Solar & Passive Solar. As the need of the hour is to use more and more renewable energy resources and as solar energy is the largest renewable energy source available it is essential to promote it. Also, now a day's government is giving us subsidies if we switch to solar energy consumption instead of regular energy supplied by them. So, it is advised to take essential steps towards moving towards clean energy.

After that, various queries were raised by students regarding entrepreneurship. Expert questioned the process for starting their own business in the field of solar power. The seminar was quite informative. In the end, a vote of thanks was given by Er. Harsimran Singh, HOD, Department of Electrical Engineering for such an informative session.





Seminar on Entrepreneurship: Steep Rise of Entrepreneurship in Generation of Solar Energy



Geo tagged photograph of the same location on dated as 13-06-2023



#### **Entrepreneurship Week**

Date: 25-09-2017-29-09-2017

Number of Students participated: 22

Name of the Resource Persons: Mr. Vikas Mittal, AGM,

Mr. R.D Singla, LEAD Bank

Mr. Amit Bansal, Chartered Accountant

Mr. Amit Mishra, ID8 VC

Name of Collaborative Institution: National Bank for Agriculture and Rural Development

Baba Farid College of Engineering & Technology organized Entrepreneurship Week from 25th September 2017 to 29th September 2017 to give its students a technical overview of Entrepreneurship and startups.

The inaugural day of the session was chaired by Mr. Vikas Mittal, AGM, NABARD. In his lecture, Mr. Vikas shared different schemes run by NABARD which support and give subsidies to budding Entrepreneurs. He said that there are many projects, schemes, and subsidies going on to develop the ecosystem of Entrepreneurship in the country but self-faith is the main attribute required to be a successful Entrepreneur. He stressed that ideas originate from the problem. In his lecture, he also discussed the major problems prevailing in rural areas. Some of the problems on which he demanded the solution/ideas were Water Conservation in Villages as well as cities; Wheat Preservation; Education of the farmers; Bio-Fertilizers; Diary Related Problems; Modified & Controlled Cold Storage and Soil-less framing.

On the Second day of Entrepreneurship Week, the resource person was Mr. R.D Singla, representative from LEAD Bank. He discussed the various activities run by the LEAD Bank at the district level. He further said that the bank assigned the lead role is expected to act as the consortium lead after identifying, through survey, areas requiring branch expansion and areas suffering from credit gaps.

The Resource person for the third day was Mr. Amit Bansal, Chartered Accountant. He motivated the students and told them that failure is part of Entrepreneurship. Good Entrepreneurs must have the appetite to take risks. He further said today companies hire the person who had failed in their start-up as they know all the integrities required to run



a successful venture.

He discussed the meaning of entities and their role. He talked about the structure, benefits, roles, and functions of the three entities: a Private Limited Company; a Registered Partnership Firm; a Limited LiabilityPartnership. Mr. Bansal described to the students the flagship program run by the Government ofIndia which is Startup India and told different tax exemptions given to the entities covered underStartup India.

Mr. Amit Mishra, ID8 VC was the expert on the 4th day of Entrepreneurship Week. He said that it is a knowledge era with multiple solutions for every problem that could be solved through Innovation and Technology. Mr. Mishra giving examples of different Startups said some of the remarkable work is going on in India by young college students.

On the last day of the event, there was a Pitch-up session where 5 Business Plans were presented by the BFCET students. The mentor in this session was Mr. Amit Mishra. Dr. Gurmeet Singh Dhaliwal, Chairman of Baba Farid College of Engineering & Technology appreciated the efforts of the Industry-Interactive Entrepreneurship Cell for creating an Entrepreneurial ecosystem on the campus and ensured full support to the IIEC in the future.







# **Entrepreneurship Week**

in collaboration with

National Bank for Agriculture & Rural Development

Name of Resource Persons

Mr. Vikas Mittal

Mr. R.D Singla LEAD Bank

Mr. Amit Bansal
Chartered Accountant

Mr. Amit Mishra

Date: 25-09-2017 to 29-09-2017



# BABA FARID GROUP OF INSTITUTIONS Bathinda, Punjab (India)

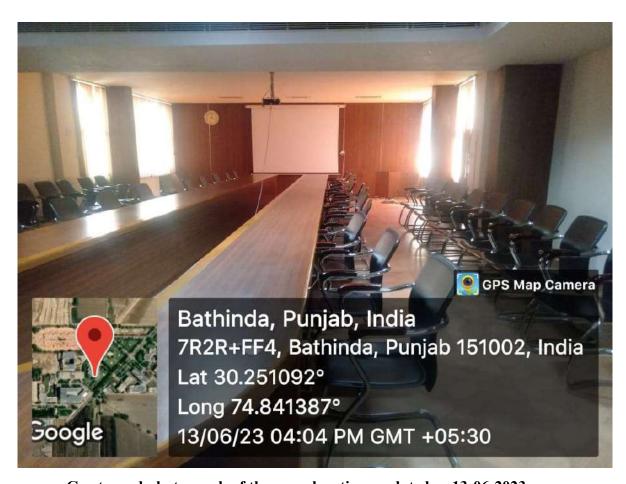
**Brochure of Entrepreneurship week** 







A glimpse of Entrepreneurship Week



Geo tagged photograph of the same location on dated as 13-06-2023