

A Report on
One Week Faculty Development Program
***“Application of Computational Intelligence in
Engineering”***

24th to 29th June, 2019

Organized by
Department of Electrical & Electronics Engineering



Vidyaya Amrutam Ashnute

B.N.M. Institute of Technology

Approved by AICTE, Affiliated to VTU, Accredited as Grade A Institution by NAAC.

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A Report on One Week Faculty Development Program on “Application of Computational Intelligence in Engineering”

Held from 24th to 29th June, 2019

Day 1: 24th June 2019

I Session: 9: 30 am to 11: am

The FDP Program was conducted from 24th June 2019 to 29th June 2019. The program was inaugurated by Mr. Gokulmuthu Narayanaswamy, Principal Software Engineer, Itron, India . The speaker delivered the key note address and gave a lecture about ‘**Introduction to Machine Learning and Application of Machine Learning in Smart Grid and Smart metering**’. He briefed about Non Intrusive Load monitoring of power system.



Key Note Speaker: Mr. Gokulmuthu Narayanaswamy

Day 1: 24th June 2019

II Session: 2: 00 pm to 4:30 pm

Dr. Srivani, Professor, R V College of Engineering, delivered a lecture on ‘**Fuzzy logic and ANN Applications in Renewable Energy Systems**’. She gave an insight about application of Computational Intelligence in Smart Grid.



Dr. Srivani, Professor, RVCE

Day 2: 25th June 2019

III Session: 9: 30 am to 5:30 pm

Mr. Pramod Naik, Senior Application Engineer, CoreEL Technologies provided a Hands on Session on ‘**Application of MATLAB and SIMULINK in Control system, Neural Network and Machine Learning**’. The session was appreciated by all the participants and it was very helpful to the researchers.



Mr. Pramod Naik, Application Engineer, CoreEL Technologies

Day 3: 26th June 2019

IV Session: 9: 30 am to 5:30 pm

Mr. Sumukh Surya , Manipal Institute of Technology, during his session delivered a talk on the theoretical aspects and ‘**Mathematical Modeling of Power Electronic Converters**’, which was followed by an appreciable hands on session using MATLAB/SIMULINK Platform.



Mr. Sumukh Surya , Manipal Institute of Technology

Day 4: 27th June 2019

V Session: 9: 30 am to 4:30 pm

Mr. Vasanth Kumar V, Assistant Manager, VI Solutions, gave a hands on session on various aspects of Lab view such as ‘**Introduction to NI Graphical Platform & NI Plug-Play Hardware architecture**’, ‘**Hands-on Real-time data acquisition and processing**’ and ‘**Demo on Power**

converters design, validation and testing process. He also discussed on NI tools for PQ Analysis, PMU and Smart Grid & Renewable energy

Day 5: 28th June 2019

VI Session: 9: 30 am to 4:30 pm

An Industrial Visit was arranged at M/s Venjay Institute of Automation at Jayanagar, Bengaluru. During the course of visit the participants Mr. R Venugopal, Managing Director, Venjay Automation, familiarized various components used for Industrial Automation. The visit included display of videos on manufacturing and process industry automations. The participants were given an insight on Relay Logic with operation of relays, PLC programming and SCADA development as applicable to Industrial Automation.



Industrial Visit to M/s Venjay Institute of Automation, Jayanagar, Bengaluru

Day 6: 29th June 2019

VII Session: 9: 30 am to 11:00 am

Mr. Nitin Telkar, Sr. Principal Solution Engineer, Cadence software, gave a lecture on ‘**AI: Today and The Future**’. He provided an awareness about various Machine learning platforms and its deployment in various interdisciplinary applications.



Mr. Nitin Telkar, Sr. Principal Solution Engineer, Cadence software

Day 7: 29th June 2019

VII Session: 11: 15 am to 12:45 pm

Dr. K.Balaraman, Director General, National Institute of Wind Energy, gave a concluding talk about Application of '**Data Analytics and Forecasting of Renewable Generation**' to wind energy and solar energy. He discussed about the opportunities available for researchers in the field of Renewable energy and data analytics.



Dr. K.Balaraman, Director General, National Institute of Wind Energy

The program ended with Valedictory program and distribution of certificates to all the participants.



Certificate Distribution to the Participants during the Valedictory Function



Faculty Development Program on “Application of Computational Intelligence in Engineering”, held from 24th to 29th June, 2019 at BNMIT, Bengaluru.

We extend our heartfelt acknowledgements to the Management of BNMIT and NewGen IEDC for providing an opportunity for the successful conduction of FDP and knowledge enhancement of young researchers.

LIST OF RESOURCE PERSONS

Sl. No.	Speaker Name	Designation	Organization Name	Date
1.	Mr.Gokulmuthu Narayanaswamy	Senior Principal Software Engineer	Itron, Bengaluru.	24/06/2019
2.	Dr. Sreevani,	Professor	RVCE, Bengaluru	24/06/2019
3.	Mr. Pramod Kr. Naik	Senior Application Engineer	CoreEL Technologies, Bengaluru	25/06/2019
4.	Mr. Sumukh Surya	Student	Manipal Institute of Technology, Manipal	26/06/2019
5.	Mr. Vasanth Kumar	Assistant Manager	VI Solutions, Bengaluru	27/06/2019
6.	Mr. Nithin Telkar	Senior Principal Solution Engineer	Cadence Design Systems, Bengaluru	29/06/2019
7.	Dr. Balaraman K	Director General	National Institute of Wind Energy, Chennai	29/06/2019

LIST OF INDUSTRIES VISITED

Sr. No.	Name, Address and contact details(*example)	Products/Service
1.	<p>Name: M/s Venjay Institute of Automation</p> <p>Address: Jayanagar, Bengaluru India - 560041</p> <p>Contact Details: Mr. R Venugopal Managing Director 94488 54111</p>	<p>PLC Programming & Automation Training</p>