# **Academics**

# 1. Subjects Taught:

- Basic Electrical Engineering
- Network Analysis
- Electrical Machines
- Control Systems
- Power Systems Operation and Control
- Energy Storage Systems
- Computer Organization
- Operating Systems
- Microcontroller
- Fuzzy Logic and Controls
- Artificial Neural Networks
- Artificial Intelligence
- Digital Image Processing

#### 2. Research interests:

- Soft computing Techniques applications to Automation in Power systems.
- Guiding research candidates leading to PhD .
- Guiding M.Tech students in projects on smart grid, big data applications.

#### 3. List of Conferences attended:

- Presented research paper at World Comp 07 ICAI 2007 on June 25-28, 2007, Las Vegas USA.
- Presented research paper at 8 th world multi conference on Systemics ,Cybernetics and informatics -SCI 2004, July 18-21,2004 ,Orlando, Florida, USA.
- Presented research paper at IEEE, International Conference on Energy Management and Power Delivery, March 3-5 1998, Singapore.

## 4. List of Workshops and short term courses attended:

- 1. Hands on course on FPGA and ASIC Design 28<sup>th</sup> December 2015 to 1<sup>st</sup> January 2016, 5 day Workshop at SJCE Mysuru.
- 2. Sustainable Energies: An interdisciplinary Research Perspective- 22<sup>nd</sup> January2016 to 23<sup>rd</sup> January2016 at Two day workshop at NIE IT, Mysuru
- 3. Technological Advances in M- Health and diagnosis of diseases using Retinal Imaging. 25<sup>th</sup> January 2016 One day workshop at SJCE Mysuru
- 4. Recent Trends in Communication Technology, 29<sup>th</sup>January 2016 to 30<sup>th</sup> January 2016, Two day workshop at SJCE Mysuru
- 5. TEQIP sponsored SIX day workshop "Pedagogy of Instructional Design and Delivery system" 12<sup>th</sup> July 2016 to 17<sup>th</sup> july 2016. One week work shop at SJCE Mysuru.
- 6. **Certificate of recognition:** Completed 2 modules on UNESCO Bangkok e-learning series on Information and Communication Technology in Education Module 1: Essentials Module 2: Decision making)
- 7. "Internet of Things (IOT) and its applications" 8<sup>th</sup> September 2016 to 12<sup>th</sup> September 2016, 5 day workshop at SJCE Mysuru.

### 5. Projects guided

UG Projects				
Sl no.	Year	Title		
1.	2006	Fuzzy logic approach to the control of dam gates		
2.	2011	Single phase multi protection relay		
3.	2013	Design and realisation of multifunction robot		
4.	2016	Internet of things based smart home		
5.	2016	Energy auditing of Golden Jubilee block SJCE		
6.	2017	Simulation of power factor improvement using Fuzzy Logic controller		
7.	2017	Study of gas insulated substation		
8.	2017	Study and proposal 220kv receiving station		
9.	2017	Building automation system using solar power and RFID		
10.	2017	Automatic GOS Operation.		

PG Projects				
Sl no.	Year	Title		
1	2014	Development of energy management system using microcontroller		
2	2015	Big data analysis for power system load research		
3	2016	Automotive ignition system		
4	2016	Automotive lighting system		

5	2016	Hybrid vehicle system and fuel cells
6	2016	Effective utilisation of median of national highways for installation of PV
		panels, solar power generation and its interconnection with grid
6	2016	Laboratory manual on "pneumatics and sensorics"
7	2017	Safety air bags in car

#### 6. Invited Technical Talks:

- AI applications to Cyber security at Somani College, Mysuru
- AI and Neural Netowork applications ,CIST, University of Mysore, Mysuru.
- Power Quality issues and Mitigation: at PES college of Engineering, Mandya
- Neural network applications at PES college of Engineering, Mandya.
- Embedded controllers in Automobiles, Institution of Engineers, Mysore.
- Electrical safety practices at Infosys, Mysore.
- Electrical safety practices ,Alstom Delhi
- Microcontrollers and applications at Institute of Road &Transport Engineering, Erode.