## ONE DAY ONLINE FACULTY DEVELOPMENT PROGRAM

REPORT ON

## "APPLICATION AWARENESS ON AUTOMATION STUDIO SOFTWARE TOOL"

25<sup>th</sup> June 2018 Held at

#### **ACS COLLEGE OF ENGINEERING**

Bengaluru

**Supported by** 

## INDIASOFT TECHNOLOGIES [P] LIMITED

**Session Handled by** 

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Organized By

Department of Mechanical Engineering



## ACS COLLEGE OF ENGINEERING

(NBA Accredited, NAAC 'A' Accredited, HLACT Accredited, ISO certified Institution) #207, Kambipura, Mysore Road, Kengeri, Bengaluru-560074

#### **About**

## **ACS COLLEGE OF ENGINEERING**

ACS College of Engineering (ACSCE), Bengaluru, an NBA accredited, NAAC A accredited, HLACT accredited, ISO certified institution, which was established in 2009 under Moogambiga Charitable Educational Trust which is approved by All India Council of Technical Education (AICTE) New Delhi and affiliated to Visvesvaraya Technological University (VTU), Belagavi. ACSCE offers 07 Undergraduate & 4 Postgraduate courses both in conventional and emerging areas, 04 of its Departments are recognized as Research Centers offering PhD/M.Sc (Engineering by Research) degrees in Science, Engineering. The College has been effectively practicing outcome based education.

<u>Location and area</u>: The city of Bengaluru is the gateway of Silicon Valley of India and is well connected with all the major cities in the country by rail, road and air. The ACSCE is about 18 km from central railway station and Bus station. The campus is on 05 sprawling hectares of land with beautiful landscapes, the campus provides an ideal environment for learning.

#### **About**

### INDIASOFT TECHNOLOGIES [P] LIMITED

More than 25 Years of Experience in Corporate, Educational and Govt. Sector

#### Established in 1993.

- ► Specialized in educational software products and services.
- ► Also providing software to government and corporate customers.
- ▶ Dealt with software like AUTOCAD, MATLAB, SOLIDWORKS etc.

#### **Direct Involvement of Management with Board of Studies**

#### **▶**DTE Karnataka:

Industrial Consultant for Mechanical and Electronics Departments.

**►VTU Karnataka:** 

**Industrial Consultant for Mechanical Department.** 

► SPPU (Pune University):

Syllabus Guidelines Consultancy for Mechanical Department.

► Shivaji University (Kolhapur):

Syllabus Guidelines Consultancy for Mechanical & Industrial Engg. Departments.

**▶DTE** and **SDCT** (Goa):

Industry Interaction for Turner and Machinist Trades and Mechanical Departments.

#### Orders and Ongoing work in Government Bodies

#### **▶**DTE Maharashtra:

2017: Supply of CNC Simulator Software

2016: Supply of Hydraulics & Pneumatics Simulator

2013: Supply of Hydraulics & Pneumatics Simulator

2012: Supply of Hydraulics & Pneumatics Simulator

2004: Supply of Solid Works CAD Software

**Various Faculty Development Programs (FDP)** 

#### **▶DSDE** Goa:

2017: Supply of CNC Simulator, Goa

2017 : Supply of Electronics Simulator, Goa

2017: Supply of BobCAD-CAM Simulator, Goa

#### ► FCRI (Fluid Control Research Institute) Pallakad:

2014 : Supply of Hydraulic & Pneumatics Simulator

#### TEQIP - World Bank

- Kurukshetra University, Haryana
- Malnad College of Engineering, Hassan
- Government College of Engineering, Chandrapur
- Government College of Engineering, Karad
- Bharati Vidyapeeth College of Engineering, Pune
- BMS College of Engineering, Bangalore
- NIE, Mysore
- IIT's and NIT's
- IIT Delhi
- IIT Jalandhar
- IIT Kharagpur
- IIT (ISM) Dhanbad
- VNIT Nagpur
- NIT Meghalaya
- NIT Trichy
- IIT Guwahati

Automation Studio is a circuit design, simulation and project documentation software for fluid power systems and electrical projects conceived by Famic Technologies Inc... It is used for CAD, maintenance, and training purposes. Mainly used by engineers, trainers, and service and maintenance personnel. Automation Studio can be applied in the design, training and troubleshooting of hydraulics, pneumatics, HMI, and electrical control systems.

#### Two versions of the software exist:

- Automation Studio Professional
- Automation Studio Educational

The educational version of Automation Studio is a lighter version used by engineering and technical schools to train future engineers and technicians. The software is designed for schools that teach technical subjects such as industrial technologies, mechatronics, electromechanical technologies, electrical & electronics, automation, and maintenance. Modeling and simulation are used to illustrate theoretical aspects.

The Tool of Choice for Teaching, Training and Learning Automation, Electrical and Fluid Power Engineering Technologies.. If you teach subjects related to hydraulic, pneumatic, electrical and control technologies, the illustration of concepts and the behaviour of systems are no doubt at the heart of your requirements.

Created in 1986 by Famic Technologies to meet the needs of technical teaching and training and used in thousands of schools worldwide, Automation Studio<sup>TM</sup> is a unique software solution, which offers intuitive design, animation, simulation and system analysis features in a versatile and user-friendly environment. It allows teachers to present more content in less time, improves students' understanding of concepts and diagnosis capabilities and brings to schools, colleges and universities an optimal return on investment

Automation Studio<sup>™</sup> is a single Integrated, interdisciplinary software for circuit design, simulation and validation of Hydraulic, Proportional Hydraulic, Pneumatic, Proportional Pneumatic, JIC/IEC Electrical, IEC/NEMA Electro technical, One-Line Diagram Electrotechnical, Digital Electronics, Allen Bradley Siemens and IEC PLC Ladder, SFC Grafcet, 2D and 3D HMI Control Panel, Mechanisms, Block Diagram, OPC and Hardware Interface to Trainer Kits.

Automation Studio $^{TM}$  is a unique design and simulation software covering all project/machine technologies including hydraulics, pneumatics, electrical, controls, HMI and communications through the entire product lifecycle. It helps to easily combine these various technologies in order to design, document and simulate complete systems.

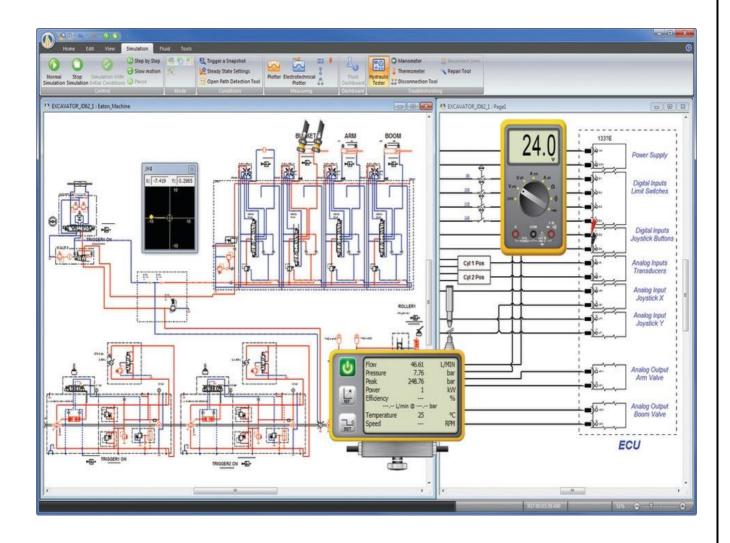
#### Automation Studio<sup>TM</sup> is the Perfect Software for

- > Hydraulic circuit design and simulation
- > Pneumatic circuit design and simulation
- ➤ Electro-hydraulic and electro-pneumatic circuit design and simulation
- > Fluid Power component sizing
- **Electrical control circuit design and simulation**
- > Virtual systems design and simulation
- **Electrical One-Line circuit design and simulation**
- > PLC control circuit design and simulation
- > Digital electronics circuit design and simulation
- **Bill of material and report documentation**
- ➤ Manufacturers catalogs for design and simulation
- > Technical teaching and professional training

Automation Studio has various symbol libraries. All libraries follow standards such as ISO, IEC, JIC and NEMA.

- Hydraulics
- Pneumatics
- Electrical (IEC & NEMA standards)
- Fluid Power & Electrical Component Sizing
- Valve Spool Designer
- OPC communications server
- Bill of Materials & Report
- PLC Ladder Logic
- HMI & Control Panel
- Digital Electronics
- Sequential Function Chart (GRAFCET)
- Electrical Controls
- Multi-Fluid Simulation

- Teachware
- Manufacturer's Catalogue
- Workflow Manager



#### **About the Online Faculty Development Program on**

# "APPLICATION AWARENESS ON AUTOMATION STUDIO SOFTWARE TOOL"

The Department of Mechanical Engineering, ACS College of Engineering, Bangalore in its efforts to organize online Faculty Development Program to create awareness on Automation Studio Software Tools, for circuit design, simulation and validation of Hydraulic, Proportional Hydraulic, Proportional Pneumatic, JIC/IEC Electrical, IEC/NEMA Electro technical, One-Line Diagram.

The Faculty Development Programs are targeted the faculties from the Department of Mechanical Engineering.

#### **Goal of the Program**

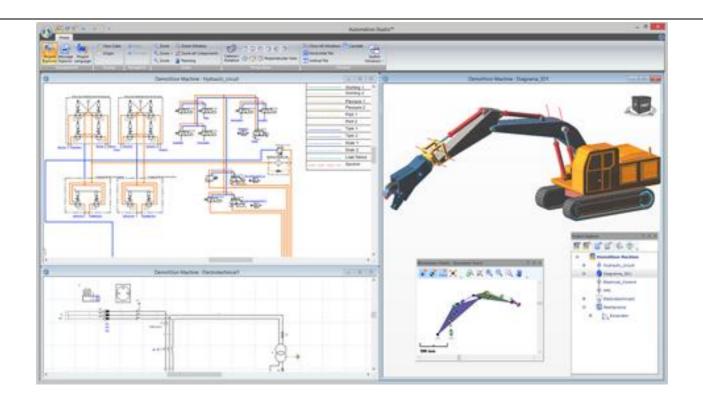
- > Create an awareness of the need and importance of Automation Studio Software tools.
- > Impart knowledge and develop skills in diverse training methods for circuit design for fluid power system.
- > Plan curriculum that can imbibe the skills and competencies to achieve goals directed by values, have a positive attitude and have the ability to cope with the changing times.
- Developing the knowledge on Circuit Design for faculties
- **➤** Usage of Automation studio tools for the faculties.
- > Guide them for "Techniques of handling tools".

The program scheduled on 25<sup>th</sup> June 2018 in an Department R and D, the session was handled by Mr. Chandrakant Ghatol, Application Engineer - Automation & CNC Technologies, India Soft Technologies Private Limited, Pune.

In the program, Mr. Chandrakant Ghatol, send a link of Team Viewer, and it was downloaded and the session was started by his guidance.

The session was attended by the Mechanical Engineering Department staffs.

The program was coordinated by the Dr. Siddesha H S and Mr. Sunilraj B.A





PHOTOGRAPH OF THE APPLICATION AWARENESS ON AUTOMATION STUDIO SOFTWARE TOOL