## Toples to be covered

- Taguchi optimization
- **MANOVA**
- Genetic Algorithm
- Hands on training using statistical software

## L ocation

Syed Ammal Engineering College is located at Ramanathapuram on the Madurai - Rameswaram National Highway, Just 8 km from the Ramanathapuram.



Chief Patron

**Dr. Chinnadurai Abdullah** MD, DMRD Correspondent, Syed Ammal Engineering College

Patron

**Dr. P. Marimuthu** ME. Ph.D., FIE., MISTE Principal, Syed Ammal Engineering College.

Convener

Dr. S. Karthikeyan ME. Ph.D

Professor & Head, Department of Mechanical Engineering, Syed Ammal Engineering College.

Coordinators

Mr. D. Somasundaram ME., (Ph.D) AP / Mech Mr. K. Senthil Kumar ME., (Ph.D) AP / Mech

## Address for Communications:

**The Coordinator** 

One Day National Level Workshop On

"Optimization Techniques for
Engineering Applications"

Department Of Mechanical Engineering
SYED AMMAL ENGINEERING COLLEGE
Dr. E.M. Abdullah Campus,
Ramanathapuram - 623 502

**Phone**: 04567 - 304 270

98426 53626, 9442942162

Email ID: mechhod@syedengg.ac.in

Website: www.syedengg.ac.in

# SYED AMMAL ENGINEERING COLLEGE



Email: saec@syedengg.ac.in office@syedengg.ac.in web: www.syedengg.ac.in

One Day National Level Workshop On

"Optimization Techniques for Engineering Applications "



Date: 30<sup>th</sup> September 2016 Venue: Seminar Hall

Organized By
Department of
Mechanical Engineering
In Association with



The Institution of Engineers (India)

#### **ABOUT THE INSTITUTION**

Conceived and executed in 1998 with a far-sighted vision to transform the socioeconomic profile of the region by Dr. E.M. Abdullah, the doyen of medical fraternity of
yesteryears, the College eponymously takes its name from the cherished memory of
his gifted mother, the late Syed Ammal, who was the moving force behind the fleet of
other illustrious institutions. Syed Ammal Higher Secondary School, Syed Ammal
Matric and Higher Secondary School, National Academy Montessori Matric Higher
Secondary School, National Academy School, National Academy Matric School, Syed
Ammal Arts and Science College, Syed Ammal Trust Hospital. the precursor institution
of the Trust - Raasi scan and A.R. Hospital, all with an overarching humanitarian and
social focus to uplift the educational standards and wellbeing of the region and beyond
-that were to rise up one after another, circa, over a span of six decades.

From its humble beginnings, Syed Ammal Engineering College (SAEC) has striven over the years to bloom into an institution of repute and standard in the comity of institutions of its élan and calibre. Affiliated to Anna University, Chennai, and approved by All India Council of Technical and Education (AICTE) and the State Government, the college offers graduate programmes in Civil Engineering, Computer Science and Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering, Information Technology and Mechanical Engineering streams and postgraduate programmes in Computer Science & Engineering, Embedded System Technologies, VLSI design, Manufacturing Engineering, Power Electronics & Drives and Master of Business Administration (MBA).

Spread over an extent of 25 acres of landmass, amidst serene and salubrious environs, the college has state-of the- art technology and avant-garde resources for its academic and administrative apparatus - be it library, pedagogical aides, class rooms, computing systems, laboratories, workshops or hostels and cafeteria, and even sports and leisure, besides housing a score of professional bodies and chapters, including that of IEEE, ISTE, CSI, IETE, IE (India) and SAE on the one hand and fine arts and culture on the other, to enliven and burnish the seemingly heavy and dreary weltanschauung of engineering education. The college has forged strategic alliances with industry facilitators - Randstat, ICT Academy, E2, Oracle, ETA to quote a few- and academic collaboration with Universiti Sains Malaysia, Penang, to bolster its intellectual capital. An exclusive research centre to hone the Faculty expertise in cutting-edge areas of academic ingenuity and vibrant Alumni, spread across the country and spanning overseas, enriches and enlarges the resource base of the college, making it as distinct and dashy as any of its class and calibre.

In terms of academic performance, the college has bagged several honours and ranks; 23 University Rank Holders in 2015, 36 University Rank Holders in 2014, 26 University Rank Holders in 2013; 15 University Rank Holders in 2012; University First Rank and Gold Medal in 2011 for IT department, as well as 12 ranks in the same year; three ranks at the Anna University level in 2004; 14 ranks at the University level, including a Gold Medal for the ECE in 2004, besides being script wise ranked 39th in November 2008, 42nd and 58th places in terms of overall pass percentage in 2008 Anna University, Chennai, examinations.

#### ABOUT THE DEPARTMENT

The Department of Mechanical Engineering was established in the year 2009 to cater to the needs of the students. The department has large and spacious laboratories with a congenial ratio of student to equipment. They get to work, hands-on and get real-time experience under the guidance of the highly experienced faculty. The department aims to achieve higher levels of glory in the years to come. The students acquire interpersonal and communication skills from our department is having full infrastructure, dedicated research faculty and latest equipments for doing research work recognized by the Anna University, Chennai as a research centre.

#### **ABOUT THE PROGRAMME**

In the current scenario, product/process development requires optimal decisions in all phases. Optimization refers to the art of using minimum limited resources to the best possible effect. Optimization techniques are employed every day in pursuit of industrial planning. allocation, scheduling, decision-making, etc. New optimization techniques are arriving daily, often stimulated by fascinating insights from other fields. Taguchi techniques are playing major role in manufacturing industries for various purpose. In order to solve optimization problems, various statistical software's are used. In this workshop Taguchi techniques, optimization problem formulation and solution techniques, Response surface methodology, simulated annealing and multi - objective genetic algorithms working with design expert software, MATLAB tool box and excel solver maybe explained are to be discussed and hands on training on statistical softwares are also to be provided.

#### **WHO CAN ATTEND**

Faculty members, UG / PG students and Research Scholars of Mechanical, Civil, Production and Aerospace Engineering can attend.

#### REGISTRATION

Registration fee for the workshop will be Rs. 300 / -. It shall be paid as a Demand Draft drawn in favour of "Syed Ammal Engineering College", payable at Ramanathapuram.

#### **IMPORTANT DATES**

Event Date: 30<sup>th</sup> September, 2016

Last Date to apply: 25th September 2016

Confirmation: 27<sup>th</sup> September 2016 (Through E- Mail)

#### SYED AMMAL ENGINEERING COLLEGE

Ramanathapuram - 623 502

One Day National Level Workshop On
"Optimization Techniques
for Engineering Applications"

## Registration Form

Name (In Block Letters):
Date of Birth & Age:
Qualification:
Experience (if any):
Designation & Dept:
nstitution / Organization:
Address:
Pincode:
E-mail:
Mobile No:
Accommodation required: Yes / No
Registration fee Rs
D.D. No Bank
Branch
Date
The given information is true to the best of my knowledge.
anne to abide by the miles and namilations arrowning the measurement

I agree to abide by the rules and regulations governing the programme.

Signature of the Applicant