

## About VJEC, Chemperi

Vimal Jyothi Engineering College (VJEC), Chemperi is one of the fast growing, ISO 9001:2015 certified, self financing, minority institution located at the hill valley of Malabar, the northern part of Kerala. The college is an educational Project of Archdiocese of Thalassery and is managed by the Meshar Diocesan Educational Trust, Archbishop's House, Thalassery. Mar George Njaralakatt, Archbishop of Thalassery is the Patron and Very Rev Fr .Dr. Thomas Melvettath is the Chairman of the trust. Vimal Jyothi established in the year 2002 is approved by AICTE, New Delhi and affiliated to Kannur University. The institution offers 6 UG courses in B.Tech and 6 PG courses in M.Tech. Further, VJEC is an ISO 9001:2015certified Institution equipped with highly qualified and experienced faculty. The institution also holds a very high pass percentage among engineering colleges of the state with 14 University ranks in five batches during the previous academic year. The alumni of this institution has excelled in various spheres and are positioned well globally in a number of leading Government, Public sector & Private organizations.

## Registration fee

Participants from Industry:- Rs.1500 /-  
Faculty members:- Rs.1000 /-  
PG students and Research fellows: Rs-500/-

## How to Register:

Interested candidates can apply online through the following link:

["https://docs.google.com/document/d/13xrlYksATSTwdPPPhNjGk1Pi9kB01AE3-a3JHYlabXHQ/edit#heading=h.mny3s033b1wq"](https://docs.google.com/document/d/13xrlYksATSTwdPPPhNjGk1Pi9kB01AE3-a3JHYlabXHQ/edit#heading=h.mny3s033b1wq)  
It is mandatory to fill up the personal details & payment details.

## About Mechanical Engineering Department

The Mechanical Engineering Department was established in the year 2004. The Department offers students the opportunity to pursue an exceptional, high quality education. The Department is one of the largest in terms of faculty, students, & activities and continues to lead and expand its activities in various directions. The Department has a distinguished faculty, dedicated staff and superb student body that effectively work together to fulfill the academic mission. The academic activities are supported by seven well equipped laboratories/research centres. Experimental and computational facilities are being continuously upgraded. A Robotic Research Centre for the research in Robotics Technology was inaugurated in 2010 and the department boasts one of the best equipped CAD-CAM centres in Kerala.



## Objective of the FDP

The recent changes in the industrial scenario have made industrial automation an emerging field for students, teachers and researchers. The proposed FDP aims to bring together teachers, engineers and research scholars to exchange and share their experience about different aspects of recent advances in the field of Automation and Robotics.

## Course Outcomes

The course will provide a forum for faculty members to exchange idea on the state of the art research and development in the field of Robotics and Automation. The course will also help to identify future research needs in the interdisciplinary emerging field.



**VIMAL JYOTHI**  
ENGINEERING COLLEGE  
Affiliated to APJ Abdul Kalam Technological University &  
Kannur University | Approved by AICTE  
Under the Archdiocese of Thalassery

**FACULTY DEVELOPMENT PROGRAM**  
On  
**“Recent Advances in Robotics and Automation” ( RARA 2017)**

**28<sup>th</sup> to 30<sup>th</sup> NOVEMBER 2017**



*Organized by*

**DEPARTMENT OF MECHANICAL ENGINEERING**

**ACADEMIC COORDINATOR:-**  
Cdr.(rtd). Raju K K  
Head of the Department ME

## Coordinators:

**Mr. RAMESHAN K P** (*Associate Professor ,ME*)

**Mr. RYNE P M** (*Associate Professor ,ME*)

**Mr. MIDHUN MUKUNDAN** (*Asst. Professor ,ME*)

**Mr. LINCE THOMAS** (*Assistant Professor ,ME*)

**Mr. SHIJIL P** (*Assistant Professor ,ME*)



## COURSE CONTENTS

1. Introduction to robotics & automation

2. Advances in Robotics

3. Control techniques

4. Fluid power control

5. Visual servoing

6. Optimization techniques.

## ACCOMMODATION

Accommodation will be arranged in the

### Venue

Msgr. Jacob Varikattu Hall  
VJEC, Chemperi

## ABOUT THE FDP

FDP on automation and robotics is an attempt by the department of mechanical engineering at VJEC, Chemperi to promote the understanding and use of conceptual, as well as practical knowledge of industrial automation, Robotics and related technologies.

Automation is the delegation of human control functions of machineries and processes to dedicated automation and robotic systems. It enables the use of control systems such as computers, PLCs, and Microcontrollers to operate machineries and processes, with the objective of reducing the need for sensory and mental requirements, as well as avoiding scope for human error. The most important aspect behind an automated industrial plant is the programmable logic controller, generally known as a PLC. PLCs along with associated automation components such as sensors, drive motors, actuators, control valves, conveyors, SCADA systems, computers and many more, enables the automation of the complete process. Robotics essentially governs the basics of automation. It is the innovative branch of logic control behind today's modern industrial automation, space science, medical science and research.

The FDP covers the essential theory combined with hands-on sessions to provide a real-

### Important Dates

Notification of acceptance – 26-11-2017  
Last date of Registration—25-11-2017

## Resource Persons

Eminent faculty from academia and industry/ organizations will be handling the classes.

Some of the confirmed speakers are :

⇒ **Dr. Sudheer A P**

(NIT Calicut)

⇒ **Dr. Abilash**

(RIT Kottayam)

⇒ **Dr. K Shekhar**

(NIT Calicut)

⇒ **Dr. Vinay Panickaer**

(NIT Calicut)

⇒ **Dr. Sreekanth**

(Industrial expert)

⇒ **Dr. Jobin K Varghese**

(NIT Calicut)

## ADDRESS FOR CORRESPONDENCE

**Mr. Rameshan K P**

Associate Professor

Department of Mechanical Engineering

Vimal Jyothi Engineering College,

Chemperi – 670632

[ramesh@vjec.ac.in](mailto:ramesh@vjec.ac.in)

Mob: 9447283715, 9747344495