Online registration link: https://goo.gl/forms/VnO5BpN25dHYjhs93

REGISTRATION AND FEES:
- Registration Fee: No Registration Fee
- Maximum of Rs.700/- (Rupees seven hundred) only per day will be given to participants for accommodation
  - Accommodation may be arranged for the participants in the Institute Guest House/Hostel on request (subject to availability)

IMPORTANT DATES:
- Last date for Registration: 25th September, 2016
- Confirmation of Registration: 26th September 2016 (through e-mail)
- Commencement of the Course: 1st October, 2016

CONTACTS:
- Prof. P. K. Sahu : +91 9861431878 (M)
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NOTE: Envelope must be super scribed as “TEQIP-II sponsored Short Term Course Current and Next Generation Aircraft Collision Avoidance (ACAS) System”
COURSE OBJECTIVE:
To avoid the possible midair encounters or collisions between the aircrafts, the FAA or Federal Aviation Administration had built up TCAS or Traffic Alert and Collision Avoidance System. In 1974, FAA asked Lincoln Laboratory of M.I.T, USA to develop this surveillance system and after that Lincoln Laboratory’s activities continued throughout the next decades and till now they are one of the superior Research and Development (R&D) organization in this field. In its current manifestation, TCAS is a worldwide mandatory tool in all aircraft systems. It has prevented several catastrophic accidents by improving the safety of air travel. This airborne framework detects the nearness of close-by aircrafts through cross-examining the transponders conveyed by these flying machines. The existing model is in operation over 20 years and it has successfully served its role in avoiding the mid-air crashes. However, significant changes to the National Airspace System are executed through the FAA's Next Generation Air Transportation System, which requires generous adjustment to the current framework. As of date, Lincoln Laboratory has been spearheading the improvement of another impact evasion framework, which is ACAS X or Airborne Collision Avoidance System X. The aim of this short term course is to audit, comprehend and think between the thoughts of present and future generation aircraft impact shirking framework.

THE INSTITUTE AND DEPARTMENT OF EE:
NIT Rourkela has made a rapid progress as an Institute of higher learning, in the last decade.

Department of Electrical Engineering was established in 1961. Since its inception, the Department is under dynamic progress and is reputed for imparting quality education for both B. Tech and M. Tech levels. The Department currently runs four M. Tech programmes with the specializations in (1) Power Electronics and Drives, (2) Control and Automation, (3) Industrial Electronics and (4) Electronic Systems and Communication. Besides, a good number of research scholars are working towards the Ph.D degree. The Department has well equipped with modern laboratories such as Power Electronics and Drives Lab., Machines Lab, Power System Lab., Control & Robotics Lab., Microwave and Antenna Lab., Nano Electronics Lab., Signal Processing & Communication Lab, Real Time Embedded Systems Lab. and Soft Computing Lab. for pursuing research in the emerging areas of Electrical Engineering.

TOPICS TO BE COVERED:
- Introduction of ACAS/TCAS
- Operation of ACAS System
- An Overview of Antenna Theory
- Features of TCAS Antenna
- Phase Detection Method and Bearing Angle Measurement by TCAS Antenna
- Design and Simulation of various Antennas for TCAS application using HFSS Tool
- Next Generation Mid-Air Collision Avoidance System for Aircraft

WHO CAN ATTEND??
All Faculties and Staffs from Engineering Institutions/Universities are eligible to apply.

WEBSITE:
http://nitrkl.ac.in/Academic/1Department/ee/cep/DOC/Brochure_ACAS.pdf

ACCOMMODATION:
Accommodation will be provided in Hall of residences or Guest Houses of NIT, Rourkela as per availability.
National Institute of Technology, Rourkela
Department of Electrical Engineering

Organizes
TEQIP-II sponsored Short Term Course

On
Current and Next Generation Aircraft Collision Avoidance (ACAS) System

During 1st and 2nd October, 2016

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**Program Coordinator:**

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