



**NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA**  
CoE-OTER under TEQIP-II sponsored Short Term Course  
on

**ADVANCED IMAGE PROCESSING SOLUTIONS FOR  
EMERGING CHALLENGES IN MEDICAL APPLICATIONS**

**25-26 September, 2016**

**[Registration form]**

1. Name:
2. Position:
3. Department:
4. Organization/Industry:
5. Address:
6. E-mail Address:

Mobile No.:

Telephone No.:

Accommodation Required: Yes / No

Date: \_\_\_\_\_ Signature of the Applicant

Place: \_\_\_\_\_

Forwarded through Head Dept./ Institution.

### **DEPARTMENT OF ELECTRICAL ENGINEERING:**

The Electrical Engineering department at NIT Rourkela has specialized faculties in all important areas of electrical engineering such as communication & signal processing, power system, power electronics & drives, control & automation and industrial electronics. The department has well equipped laboratories and the academic and research activities in the department focus on the frontier areas of electrical engineering.

### **IMPORTANT DATES:**

Receipt of applications :

**September 22, 2016.**

Course duration:

**September 25 to September 26, 2016.**

### **ADDRESS FOR CORRESPONDENCE**

**Prof. Dipti Patra (Coordinator)**

Associate professor

Department of Electrical Engineering,  
NIT Rourkela, Odisha- 769008, India.

**Phone: 0661- 2462410 (O),**

**mobile: +919437390400**

**e-mail: [dpatra@nitrrkl.ac.in](mailto:dpatra@nitrrkl.ac.in),**

**Note: Applicants are requested to send the scanned copy of signed registration form for early registration.**

Centre of Excellence in Orthopaedic Tissue  
Engineering & Rehabilitation

**(CoE-OTER)** under **TEQIP-II** sponsored

Short-Term Course

on

**ADVANCED IMAGE PROCESSING SOLUTIONS  
FOR EMERGING CHALLENGES IN MEDICAL  
APPLICATIONS**

**(AIPSECMA-2016)**

**25-26 September, 2016**



**Dr. Dipti Patra (Coordinator)**

Organized by



**Department Of Electrical Engineering  
National Institute Of Technology Rourkela  
Odisha 769008, India**

## INTRODUCTION:

Medical imaging technologies have revolutionized the health care delivery around the world. Medical imaging is the technique and process of creating visual representations of the interior of a body for clinical analysis and medical intervention. Extending human vision into the very nature of disease, medical imaging enables a new and more powerful generation of diagnosis and intervention.

Extending human vision into the very nature of disease, medical imaging enables a new and more powerful generation of diagnosis and intervention. The field of medical imaging advances so rapidly that all of those working in it, i.e. scientists, engineers, physicians, educators and others, need to frequently update their knowledge in order to stay abreast of the developments.

This course will be organized by the Department of Electrical Engineering at NIT Rourkela during 25-26 September, 2016 sponsored by Centre of Excellence in Orthopaedic Tissue Engineering & Rehabilitation (**CoE-OTER**) under TEQIP-II scheme. The goal of this short-term course is to explore the insights of advanced image processing solutions for emerging challenges in medical applications.

## SCOPE OF THE PROGRAMME:

This short term course offers an unique opportunity to acquire comprehensive knowledge and strengthen skills in current state-of-art research in the field of medical image processing. This will provide a forum for discussion on theoretical and practical aspects of advanced and upcoming medical image processing technologies, exchanging research ideas, exploring challenges and possible solutions and future scope of the research.

Scope of the course is to introduce medical imaging, i.e. Computed Tomography (CT), Magnetic Resonance Imaging (MRI) and blood microscopic images etc. and how these are currently being used in clinical practice. Understanding the limitations of advanced imaging techniques and finding the image processing solutions for medical applications will be the main focus of the course. The course is designed for academia and industry persons interested in medical imaging and medical image processing technologies.

## TOPICS TO BE COVERED:

- ❖ Overview of medical imaging and their clinical applications
- ❖ Current Clinical Problems and Advanced Medical Image Processing Techniques to handle
- ❖ Quantitative medical image analysis and Hands on practice

## REGISTRATION

Registration form is available on website.  
Website: [www.nitrkl.ac.in](http://www.nitrkl.ac.in)

Registration starts: **7<sup>th</sup> September 2016**  
Last date of Registration: **22<sup>nd</sup> September, 2016**

**Registration is free for all participants.**

(Registration kit, course materials,  
Accommodation\* and Fooding, &  
Refreshments will be provided)

**The filled in registration form should be sent to:**

**Dr. Dipti Patra**

**(Coordinator: AIPSECMA-2016)**  
**Department of Electrical Engineering,**  
**NIT Rourkela,**  
**Odisha- 769008, India**

**E-mail: [dpatra@nitrkl.ac.in](mailto:dpatra@nitrkl.ac.in)**

**\* Free Accommodation may be provided in the Institute Guest House based on availability**