

**Rajiv Gandhi Proudyogiki Vishwavidyalaya
Bhopal**

Accredited with 'A' grade by NAAC



Rajiv Gandhi Proudyogiki Vishwavidyalaya (RGPV), accredited with 'A' grade by NAAC, established in the year 1998 is truly a picture of modernization offering learner-centric programmes in Engineering, Pharmacy, Architecture & Management. University is sprawled over a vast campus of 241.4 acres, marching towards development into a center of excellence in the arena of Technical Education, Research and Innovations. Under its umbrella there are 05 UTD's 188 affiliated Engineering Colleges, 69 Pharmacy Colleges, 25 MCA Colleges and 05 Architecture colleges imparting Graduate level instructions running 23 under graduate level courses & 84 post graduate level courses. Situated amidst an aesthetic and hilly surrounding, the University is also offering Ph.D. in eight faculties.

RGPV has been selected by Ministry of Human Resource Development (MHRD) as one of the Affiliating Technical Universities (ATUs) among ten across the country for receiving TEQIP-III grant. The main objective of Faculty Development Programme (FDP) is to improve quality and equity in engineering teachers in order to up-grade the knowledge, enhancing research and teaching skills.

CHIEF PATRON

Prof. Sunil Kumar
Hon'ble Vice Chancellor, RGPV

PATRON

1. Prof. Suresh Singh Kushwah
Registrar, RGPV
2. Prof. R.S. Rajput
Director, UIT RGPV

ADVISORY COMMITTEE

- Dr. P. R. Sahu, IIT Bhubaneswar
- Dr. A. Rajesh, IIT Guwahati
- Dr. Tony Jacob, IIT Guwahati
- Dr. Ketan Rajawat, IIT Kanpur
- Prof. Rakesh Singhai, RGPV Bhopal
- Prof. Prashant K. Jain, JEC, Jabalpur

COORDINATORS

1. Prof. Prabhat Patel
2. Dr. Avinash Rai

ORGANIZING COMMITTEE

1. Prof R. K. Chidar
2. Prof. Jitendra Agrawal
3. Prof. Sanjay Kumar Sharma

Address for Correspondence

1. Prof. Prabhat Patel
Deputy Registrar (Exam)
RGPV Bhopal
(+91 9424927677)
ppatel@rgtu.net
2. Dr. Avinash Rai
Assistant Professor
Dept. of Elex. & Comm.
UIT RGPV Bhopal
(+91 9893357549)
avinashrai@rgtu.net

**Rajiv Gandhi Proudyogiki Vishwavidyalaya
Bhopal**

Accredited with 'A' grade by NAAC



One Week

FACULTY DEVELOPMENT PROGRAM

on

**CODING THEORY & ITS
APPLICATIONS**

13TH TO 17TH JUNE 2019

Organised by

Rajiv Gandhi Proudyogiki Vishwavidyalaya

Under

TEQIP-III

at



**University Institute of
Technology, RGPV**

Narsingharh By pass Road,
Near Gandhi Nagar, Bhopal (M. P.)

Department of Electronics & Comm. Engg.
University Institute of Technology, RGPV
Bhopal

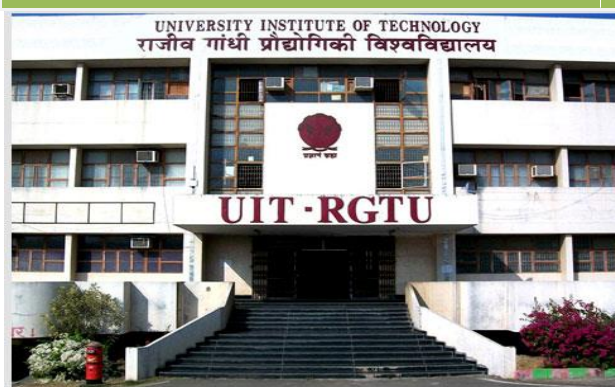
Airport Road, Gandhi Nagar,
Bhopal – 462 036 (M.P.) India
Phone : +91-(0755)-2678812
Fax : +91-(0755)-2678 819

Course Objective

The main objective of this short term training programme is to go through the concepts and to upgrade the knowledge, research and teaching skills of engineering faculties in the area of coding theory with its practical applications. The salient points to be covered in the programme are as follows:

- Introduce coding and discuss "What is coding?" and "Why do we use it?". Discuss simple error models, Hamming distance, and coding gain.
- Introduce the audience to the applications in communication theory, distributed storage, etc.
- Present a short introduction to abstract algebra, including groups, rings, fields, and vector spaces.
- Introduce linear codes
- Gain the ability to encode and decode simple linear codes. Analyze the performance of linear codes in terms of weight enumerator functions.
- Derive classical bounds on codes, the minimum distance, and the length of code. This will include the Gilbert bound, the Varshamov bound, the Hamming bound, and the Singleton bound.
- Engage the audience in active learning through problem solving.
- Encourage to become an independent learner and increase his/her awareness of the coding theory applications being used in cutting edge technologies.

About Organizing Institute & Department



UIT-RGPV, Bhopal is a community of teachers, staff & students, who are dedicated to the achievement of a shared vision of excellence. The community believes in renewing and transferring knowledge & skills and the development of positive & purposeful attitudes and values. Electronics & Communication is one of the oldest departments of the University Institute of Technology (UIT), established in the year 1987. This department was accredited, by NBA for three years, in the year 2004. The Deptt. is involved in providing quality education at both UG and PG levels. Deptt. offers UG and PG programmes in B.E. (E&CE), M.E.(Dig. Comm.), Five Year Dual Degree (B.E. + M.Tech.) Integrated Post Graduate Program and research programmes leading to Ph.D. degree.

Registration & Accommodation

- Faculty Members/Ph.D Scholars of RGPV and affiliated institutions can register for this FDP.
- There is no fee for registration.
- Registration for maximum 40 seats will be done on first come first serve basis.
- Accommodation will be made available for outstation participants on payment basis in RGPV guest house if requested in advance.

Registration Form

Rajiv Gandhi Proudyogiki Vishwavidyalaya
Bhopal

One Week

FACULTY DEVELOPMENT PROGRAM
On
CODING THEORY & ITS
APPLICATIONS

13th – 17th June 2019
Under
TEQIP-III

1. Venue: *University Institute of Technology, BPL*
2. Name:.....
3. Designation:.....
4. Organization:
5. Phone No.
6. Email id
7. Accommodation required (Y/N):.....
(if YES, then complete your registration before 5th June 2019)

Signature of Applicant with date

Signature (Sponsoring Authority)

Note: Scanned copy of duly filled and signed registration form should be emailed to coordinators till 11th June 2019.