

COURSE OBJECTIVE

Wireless and optical communication has emerged as a principal theme in today's telecommunication industry. Innovations in optical fiber technology are revolutionizing the world communication by allowing direct transmission of high-speed signals over long distances. Optical fiber communication (OFC) has found numerous applications in Telecommunications, Local area networks, High precision material processing, Sensors, Medicine etc. It is one of the fastest growing technological markets because of relatively compact size of fiber, cost-effective, high efficiency and their stable operation. Wireless Communication is by measure, the fastest expanding segment of the communication industry. Broadband wireless access is supporting rates in excess of 100 Mbps. Subsequently this led to the development of 3G through Code Division for Multiple Access (CDMA) Orthogonal Frequency Division Multiplexing (OFDM) and Multiple Input Multiple Output (MIMO). Representatives of industries and academia have started to look into the technological developments toward the next generation (5G), as the rollout of 4G mobile communication networks takes place. This course will address the latest trends and future challenges that must be met to develop high performance systems.

COURSE CONTENTS

- ★ Fundamentals of Wireless Communication
- ★ Recent Advances in Wireless Communication
- ★ Introduction to Cognitive Radio and Spectrum Sensing
- ★ Software Defined Radio
- ★ Intelligent Networks
- ★ Fundamentals of Optical Communication
- ★ WDM/DWDM Techniques & Components
- ★ Non Linear Effects in Optical Fibers
- ★ Optical Networks-Overview and Recent Trends
- ★ Future in Home Optical Network using POF
- ★ Software Tools for Research
- ★ Visit to Videocon Telecom Limited, Ludhiana

IMPORTANT DATES

Submission of Registration form by

04.06.2019

Acceptance Notification by

06.06.2019

DATE & VENUE FOR REGISTRATION

10.06.2019 (9AM) at TCC Seminar Hall,
GNDEC, Ludhiana

CONTACT DETAILS

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CHIEF PATRON

Dr. Sehijpal Singh (Principal)
Guru Nanak Dev Engineering
College, Ludhiana

PATRON

Prof. Ameeta Seehra

Head,

Department of Electronics &
Communication Engineering

ORGANISING COMMITTEE

Prof. Sandeep Thakur
(ABVGIET, Pragatinagar)

Prof. Anjali Bharti
(ABVGIET, Pragatinagar)

Dr. Narwant Singh

Dr. Balwinder Singh

Dr. Munish Rattan

Prof. Navneet Kaur

Prof. Gurneet Kaur

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Prof. Kuldeepak Singh

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Prof. Shivmanmeet Singh

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Prof. Gurinder Singh

Prof. Kirandeep Kaur

Prof. Shyna Kalra

Prof. Harleen Kaur

ONE WEEK TEQIP- III SPONSORED FACULTY DEVELOPMENT PROGRAMME ON

"Enabling Technologies for Wireless and Optical Networks"

10th-15th June, 2019



TEQIP-3
Technical Education Quality Improvement Programme



Coordinator
Dr. Baljeet Kaur

Co-Coordinator
Prof. Harminder Kaur

Organized by
Department of Electronics and
Communication Engineering

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&
Atal Bihari Vajpayee Govt. Institute of
Engineering and Technology Pragatinagar,
Shimla (H.P) -171202

ABOUT THE INSTITUTES

Guru Nanak Dev Engineering College (An Autonomous College under UGC Act), established in 1956, has been striving persistently in the field of education by comprehending the need for upliftment of rural youth in highly competitive, technologically-elevated society, in particular, and understanding the thirst for knowledge of students and quenching it in general. The College has been declared an Autonomous College by UGC, New Delhi on 17.8.2012. Apart from offering various accredited graduate level B.Tech courses, the institute also imparts thirteen Postgraduate courses both on regular and part time basis. This college has the privilege of starting Ph.D degree under Quality Improvement Programme (QIP) by AICTE, New Delhi.

Atal Bihari Vajpayee Government Institute of Engineering and Technology, a premier engineering institution was established in the year 2011 under the Society Registration Act by the Government of Himachal Pradesh. This institution is situated at Pragatinagar in beautiful apple growing valley on the bank of river Giri Ganga about 60 Km from Shimla. ABVGIET offers technical education in three disciplines B.Tech., Polytechnic and ITI. Presently, CSE and ECE courses are offered in B.Tech. and CSE, ECE and EE in polytechnic. ITI is running five courses i.e. Electrical, Electronics, Fitter, Draughtsman and Motor Vehicle Mechanic.

ABOUT THE DEPARTMENTS

The Department of Electronics and Communication Engineering, established in 1981, is one of the most dynamic departments of Guru Nanak Dev Engineering College. It was the first diversification initiative by the college, 25 years after its establishment. The department is currently running UG and PG (NBA Accredited) courses in Electronics and Communication Engineering and has around 15 scholars enrolled for doctorate. Ever since its inception, the department has been the hub of academic excellence through some great teachers who have spread their wings all over the globe. The alumni of the department are not only excelling in India but also in the Silicon Valley and other hubs of Electronics Technology. They are at the forefront of the Telecom revolution since the last 20 years. In the last two years, as a part of an academically autonomous system, the department has been taking numerous quality initiative including revamping of syllabi so that it is in tune with the outcome based system as proposed in the Washington Accord of Accreditation.

The department is exhibiting a very good pass percentage of students usually above 95% for UG/PG Courses. ECE Department is continuously maintaining strong International collaboration with outside world in form of joint research publications, editorial board memberships of reputed International journals.

The department of Electronics and Communication Engineering (ECE) at Atal Bihari Vajpayee Government Institute of Engineering and Technology offers a 4-year B. Tech. programme in Electronics and Communication Engineering. The department has well experienced and dynamic faculty members.

REGISTRATION

There is no registration fee for participants from academic institutes. All short-listed candidates are required to confirm their participation by sending the scanned copy of duly filled Registration form by Email to gndec.ece.fdp@gmail.com, latest by **04.06.2019**

Shortlisting and confirmation of eligible candidates will be on a first come first served basis. Incomplete application forms will not be entertained.

ELIGIBILITY

Faculty members of degree level engineering colleges recognized by AICTE are eligible to attend the course. Applications from various fields like ECE/EE/CSE/IT/Applied science and other related disciplines are invited.

Course Completion Certificate will be given if the attendance criterion is satisfied.

ACCOMMODATION

Accommodation will be provided in the students Hostels or Guest House on sharing basis. No TA/DA will be paid.

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REGISTRATION FORM

Name (BLOCK LETTERS): _____

Gender: _____

Qualification: _____

Designation/Department: _____

Organization: _____

Address: _____

Mobile: _____

Email : _____

Accommodation in Campus: YES / NO _____

Signature of Participant

Sponsorship & Signature of
Head of the College / Institute (with date & seal).

(Important: By signing above, Head of the College/Institute certifies that applicant is a faculty member of degree level engineering college recognized by AICTE)