

# Event Report of Short Term Course "Latest Trends in Information and Communication Technologies" Conducted by the IT Dept. during 04<sup>th</sup>-08<sup>th</sup> August 2014

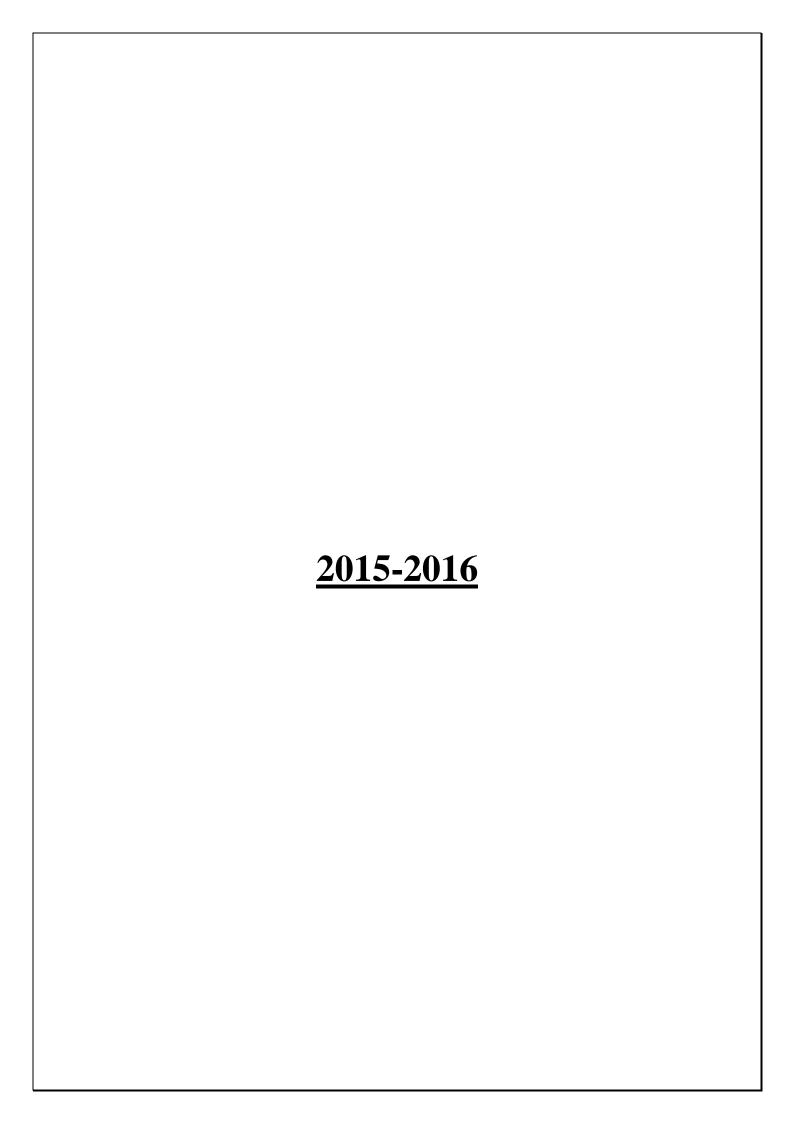
Information Technology Department of Guru Nanak Dev Engineering College, Ludhiana conducted the weeklong series of lectures and hands-on practice sessions of Short Term Course (STC) on title "Latest Trends in Information and Communication Technologies". This STC was sponsored by Technical Education Quality Improvement Programme (TEQIP-II) cell of the Institute. The valediction programme of this course was organized in the seminar hall of the campus on 08<sup>th</sup> Aug. 2014 (Wed.). This programme was organized with the objective of sharing recent developments in the areas network security, bioinformatics, image processing, natural language processing, firewall implementation and configuration with practical demonstration. As many as 17 resource persons in this programme shared their views and further research areas among the participants.

Dr. O.P. Gupta, Dy. Director, School of Electrical Engineering at Punjab Agriculture University Ludhiana was invited as chief guest of the valediction programme. In his speech, chief guest emphasised that awareness of technology trends in IT and ICT is the need of the hour, but at same time security of information transferred is important area of concern. He further elaborated that security measures can be implemented at the personal level by doing simple encryption of personal data by oneself. TEQIP-II coordinator, Dr. J.N.Jha mentioned the benefits as well as wastage of resources due to updation in technology every day.

Sh. Amolak Singh Kalsi, Technical Director & District Informatics Officer at National Informatics Centre, Jalandhar was invited as Chief Guest in the inauguration of the programme. Mr. Kalsi pointed out various innovative ideas implemented at the industry and government level for the concern of ICT. In the whole five day programme the academicians, software professional and researchers were invited to deliver the expert talk during the course. During this programme, Dr. Sarbjeet Singh, Associate Prof. from Panjab University Chandigarh elaborated the role of social media, mobility, analytics and cloud computing in the programme. Dr. Maninder Singh, Associate Prof. from Thapar University Patiala shared his views on social network analysis and big data deluge. Dr. Manpreet Singh from GNDEC Ludhiana explained the topic titled "Bioinformatics: From Evolution to Computation". Dr. Anjali Garg from GNIMT Ludhiana elaborated the Local and Global Feature based Descriptors for Shape based Image Retrieval. Mr. Amit Kamra from GNDEC Ludhiana presented new research ideas in the filed of biomedical imaging. Mr. Vipin Gupta from U-Net solution organized the hands on session on Firewall Implementation and Configuration and Public/ Private Key based Authentication using Secure Protocols like SSH, SFTP and HTTPS. Mr. Sanjeev Kumar from DAV University Jalandhar and Dr. Parminder Singh from GNDEC Ludhiana delivered expert talk on Natural Language Processing with its Various Research Areas and Text to Speech Synthesis System respectively. Dr. Harish Kumar in his speech specified the role of Cyber Security and Information Retrieval.

Dr. K.S. Mann, HOD of IT Dept. and chief coordinator of this course presented the summary & feedback report of this short term course at valediction programme. He discussed the significance of these types of courses for faculties as well as researchers and congratulated the coordinators for organizing this STC. Participation Certificates were issued to 63 participants, which came from different regions of the country to attend this STC.

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#### Guru Nanak Dev Engineering College, Ludhiana An Autonomous College u/s 2(f) and 12(B) of UGC Act 1956) Department of Mechanical Engineering

#### **Activity report**

#### Workshop on "Product Design and Development"

Title: One Day Awareness Workshop on Product Design and Development

Duration: One Day; 13.10.2015 (9:00am to 6:00pm)

National/ International: National

Capacity: Coordinator

Main Sponsoring/ Collaboration Agency:

1. TEQIP-II, Guru Nanak Dev Engineering College, Ludhiana

2. Auto Desk, India

The workshop was designed especially for the Faculty Members, Research Scholars, and students. 30 participants were present in this workshop.

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# TEQIP-II Sponsored Two Day Workshop on



# Producing Elegant Technical Research Reports Efficiently

(January 19 - 20, 2016)

#### **Patron**

Dr. M.S. Saini, Director

**Chairman** Co- Chairman

Dr. J.N. Jha Dr. Parminder Singh

HoD Civil Engg. HoD Computer Sci. & Engg.

**Chief Coordinator** Coordinator

Dr. Hardeep Singh Rai Er. Sukhjit Singh Sehra

#### Organised jointly by

Department of Civil Engineering

**Q** 

Department of Computer Science & Engineering Guru Nanak Dev Engineering College, Ludhiana, Punjab-141006

# Objective

The objective of this two day workshop is to provide insight into structured technical reports writing, which is of utmost importance for any research project including M.Tech and Ph.D degree programmes.

The participants would be guided on the selection of tools based on the philosophy that authors should be able to focus on the content of what they are writing without going through the pain of achieving required format. The tools to be discussed are possessing superior support for automatic formatting, mathematical equations, graphics, bibliography and handling of references over the traditional tools. This workshop will enable the academicians to productively utilise their valuable time in conducting research rather than spending time in formatting their reports/thesis. The workshop will focus on:

- 1. Introduction about tools
- 2. Basic Document Creation and Formatting the Document
- 3. Handling Graphics.
- 4. Handling References

# Who can apply?

The workshop is designed for the M.Tech students, academicians, research scholars, faculty members, and professionals, who are keen to learn innovative and time saving tools suitable for producing research reports.

# Workshop Venue, Dates and Timings

Venue: Seminar Hall, Consultancy Cell (http://bit.do/tccSeminarHall)

Dates: January 19 - 20, 2016

Timings: 09:00 a.m. to 05:00 p.m.

# **Resource Persons**

Resource persons to conduct the workshop are in-house expert faculty members with excellent track record of accomplishment in technical education, research and out-reach.

# **Boarding and Lodging**

Accommodation is available in the College Hostels and Guest House on reasonable charges on prior request.

# **Registration Fee**

The registration fee is Rs. 1,000/- for teachers, PG students and Ph.D. scholars from Academic Institutes and Rs. 1,500/- for participants from Industry and other organisations. The applicants are required to submit their application along with the registration fee in the form of a DD, drawn in favour of "Director, Guru Nanak Dev Engineering College", payable at Ludhiana.

# How to register for the workshop?

Please visit http://bit.do/qigne for electronically fillable registration form and email the filled form to qi@gndec.ac.in along with scanned copy of demand draft before last date of registration. The registration for limited seats will be done on first-come-first basis up-to 15<sup>th</sup> January, 2016.

# How to reach?

The college is located at a distance of 5 km from Bus Stand, 6 km from Railway Station, and 115 km from Chandigarh Airport. There is availability of all sorts of public and private transports from stated places. The nearest landmark to the college is fly-over on Gill Road along Sidhwan Canal.

# **About Institute**

Guru Nanak Dev Engineering College (GNDEC), Ludhiana (established in 1956), is one of the oldest and a premier Engineering Institute of India. The Institute is set up on 88 acres of sprawling pristine land along SH 11, i.e. Gill Road (Ludhiana-Malerkotla Highway). The foundation stone of the college was laid by Honourable Dr. Rajendra Prasad Ji, President of India on April 8, 1956. GNDEC is now an autonomous college under UGC Act 1956 [2(f) and 12(B)]. The Institution has seven Under-Graduate (UG) programmes, thirteen Post-Graduate (PG) programmes, besides being a QIP centre for Ph.D. All the undergraduate courses of the Institute are accredited by National Board of Accreditation (NBA), AICTE, New Delhi.

# **About Department**

# **Civil Engineering:**

Civil Engineering Department has been accredited by National Board of Accreditation (NBA) since 2004 and is running three full time PG programmes (Structural Engineering; Geo-technical Engineering; Environmental Science and Engineering) and one part-time PG programme (Soil Mechanics and Foundation Engineering) along with UG programme in Civil Engineering in two shifts. The department has the state of art facilities for R&D activities.

# Computer Science & Engineering:

Computer Science & Engineering Department was established in 1997 and has been accredited by National Board of Accreditation (NBA). Department is currently offering UG and PG programmes with an intake of 180 and 18 respectively. The department has various laboratories equipped with state-of-the-art computing facilities to support the research and teaching activities.

# **Address for Correspondence**

Er. Sukhjit Singh Sehra

Department of Computer Science & Engineering

Guru Nanak Dev Engineering College

Ludhiana, Punjab - 141006

Phone: +91 98559 59200 Email: qi@gndec.ac.in

# Workshop on Producing Elegant Technical Research Reports Efficiently (January 19 – 20, 2016)

#### **List of Participants**

S No	Name	Designation	Affiliation
11	Aman Kumar	Faculty	SLIET
2	Amandeep Verma	PG Student	GNDEC
3	Ameeta Seehra	Faculty	GNDEC
4	Amit Sagar	PG Student	GNDEC
5	Amritpal Kaur	PG Student	GNDEC
6	Anjali	PG Student	CU, Mohali
7	Anterpreet Kaur	PG Student	GNDEC
8	Antterpreet Kaur	PG Student	GNDEC
9	Anuradha	PG Student	CU, Mohali
10	Ardamanbir Singh	Faculty	GNDEC
11	Arvinder Singh	PG Student	GNDEC
12	Avtarpreet Singh	PG Student	GNDEC
13	Bhupinder Kaur Srao	Faculty	CU, Mohali
14	Bindia Tarika	Faculty	GNDEC
15	Charanjit Singh	PG Student	GNDEC
16	Dhruv Chander Pant	PhD Scholar	GNDEC
17	Ekta Gupta	Others	
18	Gaurav Gupta	PhD Scholar	NITTTR
19	Hanisha	PG Student	GNDEC
20	Hardev Singh	PG Student	GNDEC
21	Harjinder Kaur	PG Student	GNDEC
22	Harmandeep Singh	Faculty	SLIET
23	Harmandeep Singh Gill	PG Student	GNDEC
24	Harpreet Kaur Grewal	Faculty	GNDEC
25	Harsimranjit Singh	PG Student	GNDEC
26	Harsimranpal Kaur	PG Student	GNDEC
27	Harwinder Singh	PhD Scholar	LLPR Moga
28	Inderjit Singh Dhanoa	Faculty	GNDEC
29	Inderpreet Kaur Dhindsa	Faculty	GNDEC
30	Jagbir Singh	Faculty	GNDEC
_	Jagdeep Singh	Faculty	GNDEC
	Jagdish Kamboj	Faculty	CU, Mohali
	Jasleen Kaur	PG Student	GNDEC
34	Jeevan Bhatia	PG Student	GNDEC
35	Jeevesh Kumar	PG Student	NITTTR
36	Kamal Kishor	PG Student	NITTTR
37	Kanwalpreet Sahni	Faculty	GNDEC
38	Kanwardeep Singh	PG Student	GNDEC
39	Lovedeep Singh	PG Student	GNDEC
	Lovepreet Singh	PG Student	GNDEC
1-1/12	Maninder Savra	PG Student	GNDEC

Prof. & Head of Civil Engg. Dept. G. N. D. E. College, LUDHIANA

Land State S	Name	Designation	Affiliation
42	Manjot Singh	PG Student	GNDEC
43	Manvir Singh	PG Student	GNDEC
44	Mehak Sood	PG Student	GNDEC
45	Milanpreet Kaur	PG Student	GNDEC
46	Mukesh Kumar	PG Student	GNDEC
47	Navneet Kaur	Faculty	BBSBEC
48	Navneet Kaur	Faculty	GNDEC
49	Navneet Kaur	PG Student	GNDEC
50	Neeraj Bhanot	PhD Scholar	IITD
51	Pankaj Bhambri	Faculty	GNDEC
52	Pardeep Singh	Faculty	GNDEC
53	Parminder Kaur Wadhwa	Faculty	GNDEC
54	Parminderjeet Singh	Faculty	GNDEC
55	Pawan Verma	PG Student	GNDEC
56	Prateek Malhotra	PG Student	NITTTR
57	Preetinder Singh Brar	Faculty	Chitkara
58	Rajinder Ghai	PhD Scholar	TU
59	Raman Preet	Faculty	LPKC
60	Ramandeep Sharma	PG Student	GNDEC
61	Randhir Singh	Faculty	GNDEC
62	Sakshi Dua	Faculty	LPKC
63	Satwinderjit Kaur	Faculty	GNDEC
64	Sayantan Ghosh	PG Student	NITTTR
65	Shahbaz Singh	PG Student	GNDEC
66	Simrat Kaur	Faculty	BBSBEC
67	Sukhpreet Kaur Gill	PG Student	GNDEC
68	Sumeet Kaur Sehra	Faculty	GNDEC
69	Sumeet Rehal	PG Student	GNDEC
70	Upasna Sharma	PG Student	GNDEC
71	Vijay Kumar	PG Student	GNDEC
72	Vikas Rattan	Faculty	Chitkara
73	Vivek Thapar	Faculty	GNDEC

sils,

Dr. H S Rai Coordinator, Workshop Producing Elegant Technical Research Reports Efficiently

Prof. & Head of Civil Engg. Depu. G. N. D. E. College. LUDHIANA

#### **Activity Report**

#### Two Day Workshop on Producing Elegant Technical Research Reports Efficiently

The Department of Civil Engineering and Computer Science & Engineering organised jointly TEQIP-II sponsored two day work on "Producing Elegant Technical Research Reports Efficiently" held from 19<sup>th</sup> and 20<sup>th</sup> January, 2016. The workshop started with inaugural sessions on 19<sup>th</sup> January, 2016, Mrs. V. Puri was the chief guest of the day and Director GNDEC, Ludhiana presided over the function. Dr. J.N Jha and Dr Parminder singh, chairman and co-chairman of the workshop emphasised on the need of efficient tools for report writing. Seventy Three research scholars (Ph.D. and M.Tech) from various institutes registered for the workshop.

The workshop sessions for both days were hands on lab sessions, where participants learnt and experimented with LaTeX software and Reference Manager software for writing research reports efficiently. The participants were be guided on the selection of tools based on the philosophy that authors should be able to focus on the content rather than achieving the required format. The tools used for conducting workshop were having superior support for automatic formatting, mathematical equations, graphics, bibliography and handling of references over the traditional tools. This workshop enabled the academicians to productively utilise their valuable time in conducting research rather than spending time in formatting their reports and thesis. The workshop ended with a quiz and feedback session. Dr. Hardeep Singh Rai (coordinator) and Mr. Sukhjit Singh Sehra (Co-coordinator) thanked the participants.



# Guru Nanak Dev Engineering College, Ludhiana

An Autonomous College u/s 2(f) and 12(B) of UGC Act 1956)

### **Department of Mechanical Engineering**

# Activity report on Improved Industry institute interaction (3rd Feb 2016)

A program on industry institute interaction was organised in Mechanical and Production Engg Department of GNDEC in collaboration with QCFI Hyderabad. Dr. R.K Garg Director (Northern region, QCFI) and two experts elaborated how academia can help industries for improving productivity with small investments and data collection/handling. It was agreed upon unanimously that research initiatives need to be taken in collaboration with institutions for the overall development and growth of industries. Around 30 MDs and CEOs and officials of top industries of Ludhiana (mostly linked to FICO) and government officials attended this program. Detailed deliberations were made by Mr K.K Seth (Seth Industrial corp.), Mr Ranjodh Singh (GST group of industries), Mr G.S Kular (Kular International), Dr. M.S Saini (Director GNDEC), Dr. R.S Seehra and Dr. S.B Singh (Ex- Principals GNDEC), Dr. Sehijpal Singh -HOD -Mechanical Engg Deptt) and other faculty members of GNDEC. A MoU between Federation of Industrial and Commercial Organisation (FICO) and GNDEC was signed. The primary purpose of this MoU is to increase the mutual participation of industry and institution in technological developments. A model is envisaged in which groups of second year students will be adopted by the industries for enhancing their engineering skills. Mr G.S Kular President of FICO made a commitment that the industries shall create a healthy and sustainable link with GNDEC to consistently mentor the students from their second year. FICO and QCFI had agreed to open a chapter of QCFI in Ludhiana for providing training to the industries on quality issues and creating effective interaction between industries and GNDEC. Around 55 participants took advantage of this interactive session.



#### Guru Nanak Dev Engineering College, Ludhiana

An Autonomous College u/s 2(f) and 12(B) of UGC Act 1956)

#### **Department of Mechanical Engineering**

#### Consolidated report on Faculty development program

The faculty development program was organized by the mechanical engineering department on dated, 31<sup>st</sup> May, 2016 to 4<sup>th</sup> June, 2016 under the guidance of Director GNDEC Ludhiana &Head of the dept. Mechanical engineering GNDEC Ludhiana (sponsorship by TEQIP-II) on topic Research methods for engineers. The programme was designed especially for the faculty & researcher in different fields of mechanical engineering.

The experts from IIT's, NIT's & other reputed institutions were delivered lectures followed by practice sessions on relevant software's. About forty participants from all regions were successfully attended this programme and enhanced their knowledge theoretically as well as practically. The expertise mainly focused on the practical sessions so that the researcher and academicians took the required benefits. Around 45 participants were present in this FDP.

#### Objective of the programme

- 1. To enhance the capabilities of teaching faculty in the domain to choose better research methods for their research applications.
- 2. Practice on software applications like SPSS &MINI TAB.

#### Sessions of the programme

Session I:

09:30 a.m. TO 11.00 a.m.

Tea break (11:00 a.m. to 11:45a.m.)

Session II:

11:15 a.m. TO 12.45 p.m.

Lunch (12:45 p.m. to 01:30 p.m.)

Session III:

01:30 p.m. TO 03.00 p.m.

Tea break (3:00 p.m. to 03:15p.m.)

Session IV:

03:15 p.m. TO 4.45 p.m.

### Key points of the programme

- Introduction to engineering research
- Literature review
- Statistical analysis
- Optimization techniques
- Simulation modeling
- Survey methods
- Experimental techniques
- •Design of experiments
- Research communication
- Practical sessions on different software's

#### Programme schedule & topic covered

		Speaker's	Contents
Day1	Session1 Registration & inauguration	Dr. Sehijpal Singh	Introduction about FDP
		Dr. A.P. Singh(Dean P.T.U)	Applications of research
	* 1	Dr. M.S. Saini(Director GNDEC)	Advancement in engineering and innovation
	Session 2	Dr. J.S. Khamba (Director COE Pbi. Uni.)	Introduction to engineering research.  • What is research?  • Criteria for good research  • Problems in research  • Research process  • Research design and methodology  Etc.

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	Session 3	Dr. Seema Sharma.(IIT Delhi)	Hypothesis testing •ANOVA and MANOVA. •One-Way ANOVA •Factorial design
	Session 4	Dr. Seema Sharma.(IIT	Hypothesis testing
		Delhi)	•Two way ANOVA •Hypothesis testing •Null Hypothesis •Alternative Hypothesis
Day 2	Session1	Dr. M.K. Barua(IIT Roorkee)	Multi Variate analysis(part-1) •Factor analysis •Factor analysis design process •Rotational approach
	Session2	Dr. M.K. Barua(IIT Roorkee)	Multi Variate analysis(part-1) •Scree test for HBAT •component analysis •Two sample test and ANOVA
ā	Session 3	Dr. Khushdeep Dharni.(PAU, Ludhiana)	Data analysis by SPSS, And excel sheet.
	Session 4	Dr. Khushdeep Dharni.(PAU, Ludhiana)	Hand on experience on excel sheet
	3 3	Dr. Harwinder singh.(GNDEC)	Implementation of ANOVA. •Statistical techniques
Day 3	Session1	Dr. R.K .Garg(NIT Jalandhar)	Design of experiments.  •Design of Experiments (DOE)  •Basic Idea  •Factorial Design
	Session2	Dr. R.K .Garg(NIT Jalandhar)	Design of experiments. •Fractional Factorial Design •Simple Design

F	Consisur 2		
	Session 3	Dr. Harkesh Kumar Kansal.(UIET PU)	Hand on experience on DOE software's  •Taguchi techniques. •RSM.
9	Session 4	Dr. Harkesh Kumar Kansal.(UIET PU)	Hand on experience on DOE software's  •Mini tab 16.0
Day 4	Session1	Dr. Jagwinder singh (NIT Jalandhar)	Multi Variate analysis(part-II)  •Cluster Analysis  •Discriminant analysis.
	Session2	Dr. Jagwinder singh (NIT Jalandhar)	Multi Variate analysis(part-II)  •Factor analysis on SPSS.  •Multiple regression
	Session 3	Dr. Inderdeep singh.(IIT Roorkee)	Imaging as a research tool •Finite modelling and analysis. •Introduction about Composite.
	Session 4	Dr. Inderdeep singh.(IIT Roorkee)	Imaging as a research tool •Applications of composites
Day 5	Session1	Dr. Rupinder Singh (GNDEC Ludhiana)	Research communication funding opportunities.
	Session2	Dr. Rupinder Singh (GNDEC Ludhiana)	Research communication funding opportunities. •Funding agencies in India.
		Dr. S.P.Singh(IIT Delhi)	Modeling & Simulation. Simulation based engineering.
	Session 3	Dr. Akshay Girdhar(GNDEC)	Handling Plagiarism issues in research.
		Dr. Sehijpal singh.(GNDEC)	Basics of research paper writing and publishing •Hourglass Model •Basics of research paper

Session 4	Dr. Pardeep kumar.(IIT Roorkee)	<ul> <li>Writing and publishing of technical paper</li> <li>Taguchi methods</li> <li>Applications of research methods</li> </ul>
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#### **Organizing Committee**

Patron

Prof. (Dr.) M.S. Saini (Director)

Chief Co-ordinator

Prof. (Dr.) Sehijpal Singh (HOD)

Coordinators

Prof. (Dr.) Harwinder Singh

Prof. (Dr.) Paramjit Singh

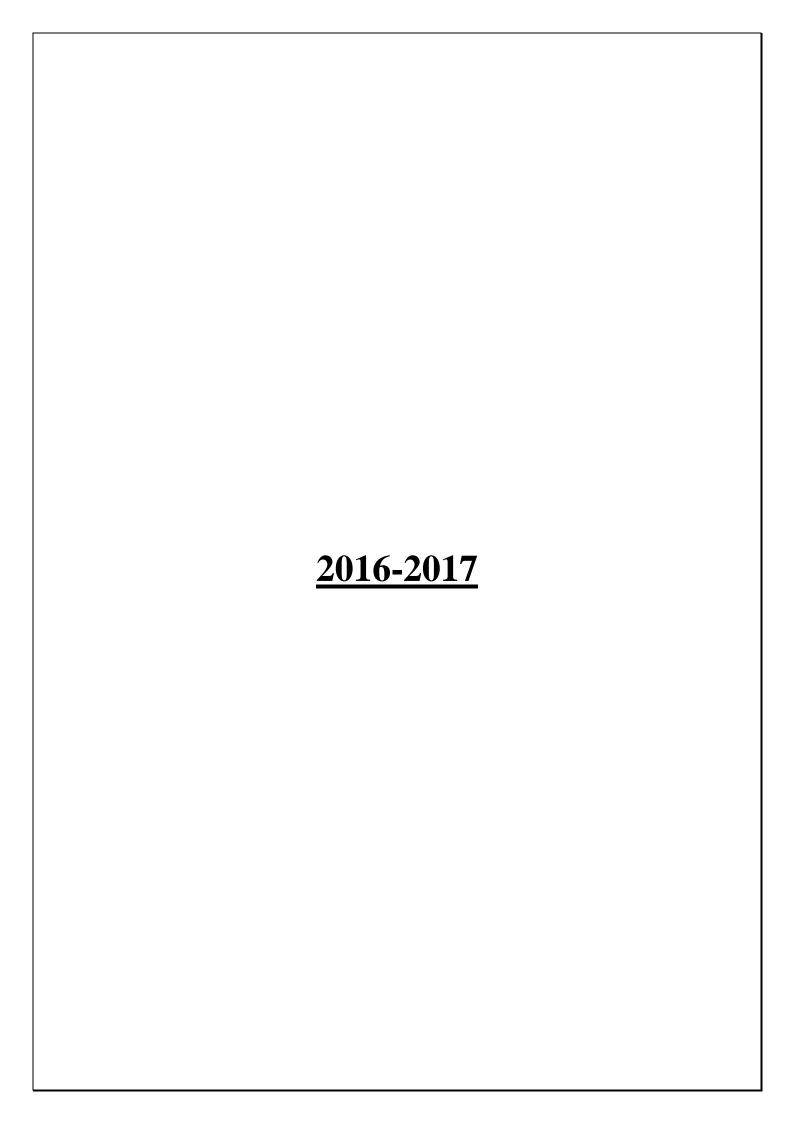
Co- Coordinators

Prof. Ardamanbir Singh

Prof. Aprinder Singh

Organizing committee (Faculty GNDEC Dept. of ME)

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#### Guru Nanak Dev Engineering College, Ludhiana An Autonomous College u/s 2(f) and 12(B) of UGC Act 1956) Department of Mechanical Engineering

#### **Activity report**

Workshop on 'Design of machine elements using NASTRAN software'

The workshop was organized by the mechanical engineering department from 16 Sept. 2016 to 17th Sept 2016 on topic 'Design of machine elements using NASTRAN software'. The workshop was designed especially for the Faculty Members, Research Scholars, and students. Nastran workshop is designed to provide learners with the rudimentary knowledge of design and analysis. The trainees learn linear and non-linear FEA, its applications and modeling techniques. Throughout this training, concepts are systematically introduced and reinforced to help participants learn in a better way. 35 participants were present in this workshop.



#### **About Institute**

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#### **About Department**

Computer Science & Engineering Department was established in 1997 and has been accredited thrice by National Board of Accreditation (NBA). Department is currently offering undergraduate and postgraduate programmes with an intake of 180 and 18 respectively. Ph.D. programme is also being offered in the department. The department has various laboratories equipped with state-of-the-art computing facilities to support the research and teaching activities. The research activities in the department involve fields like natural language processing, image processing, big data, cloud computing, software engineering, network security, etc.

#### Address for Correspondence

Er. Sukhjit Singh Sehra
Department of Computer Science & Engineering
Guru Nanak Dev Engineering College, Ludhiana,
Punjab – 141006

Phone: +91 98559 59200 Email: ids@gndec.ac.in

#### **TEQIP-II Sponsored**

#### **Two Day Workshop**

on

# **Insights of Data Science**

(October 21-22, 2016)



#### **Patron**

Dr. M.S. Saini, Director

#### Chairman

Dr. Parminder Singh HoD Computer Sci. & Engg.

#### **Coordinators**

Er. Sumeet Kaur Sehra Er. Sukhjit Singh Sehra

#### Organised by

#### **Department of Computer Science & Engineering**

Guru Nanak Dev Engineering College, Ludhiana, Punjab – 141006 [An Autonomous College u/s 2(f) and 12(B) of UGC Act. 1956]

#### **Objective**

The objective of this two day workshop is to provide insight into data science, an interdisciplinary field about processes and systems to extract knowledge or insights from data in various forms, either structured or unstructured. This area is of utmost importance as there is an significant and growing demand for data science professionals and researchers in businesses, public agencies, and non-profits organisations. The selection of data science tools is based on the philosophy to gain insight to the methodologies used in the data science process and how to successfully harness machine learning to convert data into actionable business insight. This workshop will introduce to participants the various skills that go into data science, provide practical walk-through of relevant languages and tools and lay down a study plan for moving forward in this field. The workshop would focus on:

- Introduction to Data Science
- Machine learning
- Programming language
- Open source Data Science Tools

#### Who can apply?

The workshop is designed for the research scholars, academicians and professionals, who are keen to learn innovative and time saving tools suitable for fulfilling their data analysis needs.

The under-graduate and post-graduate students those are interested to start their career in this upcoming field of professional growth.

#### **Workshop Venue, Dates and Timings**

Venue: Seminar Hall, Department of Computer Sci. & Engg.

Dates: October 21-22, 2016

Timings: 09:00 a.m. to 05:30 p.m.

#### **Resource Persons**

Resource persons to conduct the workshop are experts from industry and academia with excellent track record of accomplishment in technical education, research and out-reach.

#### **Boarding and Lodging**

Accommodation is available in the College Hostels and Guest House on reasonable charges on prior request.

#### **Registration Fee**

The registration fee for attending this workshop is as follows:

Research scholars: Rs. 500/-

• Faculty from academics: Rs. 1000/-

• Industrial persons and others: Rs. 1500/-

The applicants are required to submit their application along with the registration fee in the form of a demand draft, drawn in favour of "Director, Guru Nanak Dev Engineering College", payable at Ludhiana.

#### How to register for the workshop?

Please visit http://gndec.ac.in/ids\_workshop for electronically fillable registration form, take print and email the scanned copies of duly signed application form, demand draft and Identity card to ids@gndec.ac.in, before last date of registration. The registration for limited seats will be done on first-come-first basis up-to 17<sup>th</sup> October, 2016. Bring the hard-copies of above documents at registration desk.

#### How to reach?

The college is located at a distance of 5 km from Bus Stand, 6 km from Railway Station, and 115 km from Chandigarh Airport. There is availability of all sorts of public and private transports from stated places. The nearest landmark to the college is fly over on Gill Road along Sidhwan Canal.

# Activity Report Two Day Workshop on Insights of Data Science

The Department of Computer Science & Engineering organised TEQIP-II sponsored two day workshop on 'Insights of Data Science' during 21st & 22nd October, 2016. The workshop started with inaugural sessions on 21st October, 2016, Dr. Sarabjot Singh (Founder and Chief Data Scientist at Tatras Data, New Delhi) was the chief guest of the day and Director GNDEC, Ludhiana presided over the function. Dr Parminder singh, chairman of the workshop emphasised on the need of data science in diverse areas. Fifty Three participants including faculty and research scholars (Ph.D. and M.Tech) from various institutes registered for the workshop.

The workshop sessions were delivered by the persons from Industry, Research organisation (DRDO) and Academia. The participants learnt data science and its practical aspects and suitability to particular types of applications. During lab session the participants were be guided on the selection of tools for Data science and has hands on session with R- language using Jupyter-Notebook. This workshop enabled the academicians to direct their research deeper into data science. The workshop ended with feedback session. Er. Sumeet Kaur Sehra and Mr. Sukhjit Singh Sehra (Coordinators) thanked the participants.

(Coordinator Workshop)



#### Prof. Gurpurneet Kaur

Assistant Professor Department of Electronics & Communication Engg. . GNDEC, Ludhiana.

Phone: 0161-5064765(O)

E-Mail: gne.ecefdp@gmail.com

#### Prof. Naazia Makkar

Assistant Professor
Department of Electronics &
Communication Engg., GNDEC,
Ludhiana.

Phone: 0161-5064765(O)

E-Mail: gne.ecefdp@gmail.com

### GENERAL IONFORMATION

Guru Nanak Dev Engineering College, Ludhiana is the oldest and a premier Engineering Institute of India. It is an autonomous college under UGC Act 1956 [2(f) and 12(B)]. The Institute is setup on 88 acres of sprawling pristine land on Ludhiana-Malerkotla state highway. Ludhiana city is a well known Industrial hub in Northern India and is well connected by direct rail service with all parts of India. The beautiful campus is about 7 kms away from railway station. The weather in the month of July in Ludhiana is hot with temperature around 25°C.

#### REGISTRATION

There is no Registration fee for the participants from academic Institutes. Participants from industry/ field shall have to pay registration fee of Rs. 1,000/-

TEQIP-II Sponsored
TWO DAY WORKSHOP

on

"EFFECTIVE TEACHING PEDAGOGY & RESEARCH METHODOLOGY" (March 17, 2017 to March 18, 2017)



Chief Coordinator

Dr. Sandeep Singh Gill

Coordinators

Dr. Munish Rattan Prof. Narwant Singh Grewal

Organising Secretary

Prof.Gurpurneet Kaur Prof. Naazia Makkar

Organized by

Department of Electronics & Communication Engineering

GURU NANAK DEV ENGINEERING COLLEGE

Ludhiana, Punjab - 141006

Phone No. 0161-5064765 E-mail: gnc.ccefdp@gmail.com



#### ABOUT

Pedagogy is the art (and science) of teaching. The word teaching is a simple word but its meaning or significant is not so and the term effective teaching demands various integrated activities in teaching-learning system. Effective teachers use an array of teaching strategies because there is no single, universal approach that suits all situations.

Scientific research is a chaotic business, stumbling along amidst red herrings, errors and truly, creative insights. Research is an investigation of finding solutions to scientific and social problems through objective and systematic analysis. It is a search for knowledge, that is, a discovery of hidden truths. Only through research it is possible to make progress in a field. The results of scientific research very often force a change in the philosophical view of problems which extend far beyond the restricted domain of science itself.

The course aims at imparting skills for effective teaching pedagogy and research methodology.

#### **COURSE CONTENTS**

- · Essentials of Effective Research.
- Effective Teaching.
- · Modern Teaching Tools.
- Teaching Strategies.
- Research definition, types & framing of research problems.
- Research design in context of Engg. Problems.
- Hypotheses Testing

#### FACULTY

Experts from NITTR, Chandigarh and Deenbandhu Chhotu Ram University of Science and Technology. Sonepat besides faculty from our institute will deliver expert talks.

#### ELIGIBILTY CRITERIA

The program is interdisciplinary in nature and has been specifically designed for all Engineering Sciences & Management PG students and newly joined Faculty members.

#### BOARDING AND LODGING

Accommodation shall be provided in college hostels free of charge. However, guest hotel/lodge may be booked on payment basis if intimated well in advance.

### IMPORTANT DATES

Last date for receiving Application:

March 15, 2017

Notification of Acceptance:

March 16, 2017

TEQIP-II Sponsored Workshop on

#### "EFFECTIVE TEACHING PEDAGOGY & RESEARCH METHODOLOGY"

(March 17, 2017 to March 18, 2017)

APPLICATION FORM

Name:		
Father's Name:		
Date of Birth:	_	
Academic Qualification:		
Designation:		
Address of Sponsoring Auth		
Experience (years) :		
Mobile No	· · ·	
E-Mail :		
Accommodation required:	Yes/N	
Date:		
Signa	ature of A	plicant

The applicant will be permitted to participate inhe above programme, if selected.

SPONSERSHIP CERTIFICATE

Signature of sponsoring authority

#### TEQIP-II SPONSORED WORKSHOP

ON

Effective Teaching Pedagogy and Research Methodology

(17th - 18th March, 2017)

			SCHEDULE				
Day 1: 17 March	2017 (Friday)						
3:30am-11:00am	11:00am-11:15am	11:15am-12:45pm	12:45pm-1:45pm	12.45 4.45			
Session - 1.1	Tea	Session - 1.2			3:15pm-3:30pm	3:30pm-5:00pm	
Sr n - 1.1	In	The state of the s	Lunch	Session - 1.3	Tea	Session - 1 4	
	Dr. Harvinder Singh, GNDEC Ludhiana		Essential of effective research				
Session - 1,2	Dr. Vidhu Mohan, Punjab University Chandigarh		Effective Teaching				
Session - 1.3 Dr. Vidhu Mohan, Punjab University Chandigarh		Modern Teaching	Tools				
Session - 1.4. Dr. Harvinder Singh, GNDEC Ludhiana		Teaching strategie					

	, ONDEC Eddinana	l eaching strategie	es		
2017 (Saturday)	100 P				
11:00am-11:15am	11:15am-12:45pm	12:45pm-1:45pm	1:45pm-3:15pm	3:15pm-3:30pm	3:30pm-5:00pm
		Lunch	Session - 2.3	Tea	Session - 2.4
Dr. J. S. Saini, D. C. R. Univ. of Sci. and Tech. Murthal, Sonipat		Research definition, types and framing of research problems			ems
Dr. J. S. Saini, D. C. R. Univ. of Sci. and		Research design i	n context of engine	ering problems	
		Pedagogical analy	/sis		
Valediction					
	2017 (Saturday) 11:00am-11:15am Tea  Dr. J. S. Saini, D. C Tech. Murthal, Soni Dr. J. S. Saini, D. C Tech. Murthal, Soni Prof. Arvind Dhingra	2017 (Saturday)  11:00am-11:15am	2017 (Saturday)  11:00am-11:15am	2017 (Saturday)  11:00am-11:15am	2017 (Saturday)  11:00am-11:15am

--- ORGANISED BY ---

Department of Electronics and Communication Engineering GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA

#### Guru Nanak Dev Engineering College Ludhiana

(Department of Electronics & Communication Enginering)

(An Autonomous College under UGC Act.)

No.ECE/ 1654

Date: (7/3/17

Director, GNDEC

Through

Coordinator TEQIP-II,

GNDEC, Ludhiana.

The Department of Electronics and Communication Engineering is planning to organize a workshop of two days under TEQIP-II, from 17 March 2017 (Friday) to 18 March, 2017 (Saturday). The workshop is of multidisciplinary nature and is titled as "Effective Teaching Pedagogy and Research Methodology". It is targeted at PG students and young engineers. You are requested to allow us to conduct the workshop and sanction Rs. 1,00,000/- as per TEQIP-II rules. The budget estimate is attached along with.

Thanking You,

Yours sincerely,

HOD (ECE)

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An Autonomous College u/s 2(f) and 12(B) of UGC Act 1956

NBA Accredited UG Programmes under Tier-I (Washington Accord), "A" Grade NAAC Accredited, TCS Accredited AICTE Approved, Punjab Govt. Aided Status - Affiliated to I. K. Gujral Punjab Technical University, ISO: 9001:2008 Certified

	1100	
Ref. No	181	

Dated 14/3/17

#### Invitation Letter

Dr. J. S. Saini,

Professor and Chairman EED,

D.C.R. University of Science and Technology,

Murthal, Sonipat

Sub.: Invitation for expert talk

Dear Sir,

You are cordially invited for the expert talk in two day TEQIP-II Sponsored workshop on "Effective Teaching Pedagogy and Research methodology" to be held in ECE department, Guru Nanak Dev Engineering College, Ludhiana from March 17, 2017 to March 18, 2017. The schedule of your expert talk is as under:

Topic: 1. Research definition, types and framing of research problems

2. Research design in context of engineering problems

Date: 18-03-17 (Saturday)

Time: 9.30 am to 11.00 am and 11.15 am to 12.45 pm

You will be paid honorarium and TA as per norms.

With regards.

HOD (ECE)

Guru Nanak Dev Engineering College, Ludhiana

معرفج

# Workshop on "Effective Teaching Pedagogy and Desearch Methodology" on Harch 17-18, 2017

#### Receipt of Certificates:

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Report on

Two day TEQIP sponsored Workshop on "Effective Teaching Pedagogy and Research

Methodology" held from 17-18March, 2017

Coordinator, TEQIP-II,

The department of Electronics and communication successfully organized two dayworkshop on "Effective Teaching Pedagogy and Research Methodology" from 17-18 March, 2017. The program was

interdisciplinary in nature and had been specifically designed for all Engineering Sciences &

Management PG students and newly joined Faculty members. The aim of the workshop was to impart

skills for effective teaching pedagogy and research methodology.Pedagogy is the art (and science) of

teaching. The word teaching is a simple word but its meaning or significant is not so and the term

effective teaching demands various integrated activities in teaching-learning system. Effective teachers

use an array of teaching strategies because there is no single, universal approach that suits all situations

Scientific research is a chaotic business, stumbling along amidst red herrings, errors and truly, creative

insights. Research is an investigation of finding solutions to scientific and social problems through

objective and systematic analysis. It is a search for knowledge, that is, a discovery of hidden truths. Only

through research it is possible to make progress in a field. The results of scientific research very often

force a change in the philosophical view of problems which extend far beyond the restricted domain of

science itself.

The focus of the workshop was to provide the participants the advanced knowledge in the teaching and

research methodology. To accomplish this aim, first day of the workshop covered the topics like

essential of effective research, effective teaching, modern teaching tools, and teaching strategies. In the

second day of the workshop, topics like research definition, types and framing of research problems

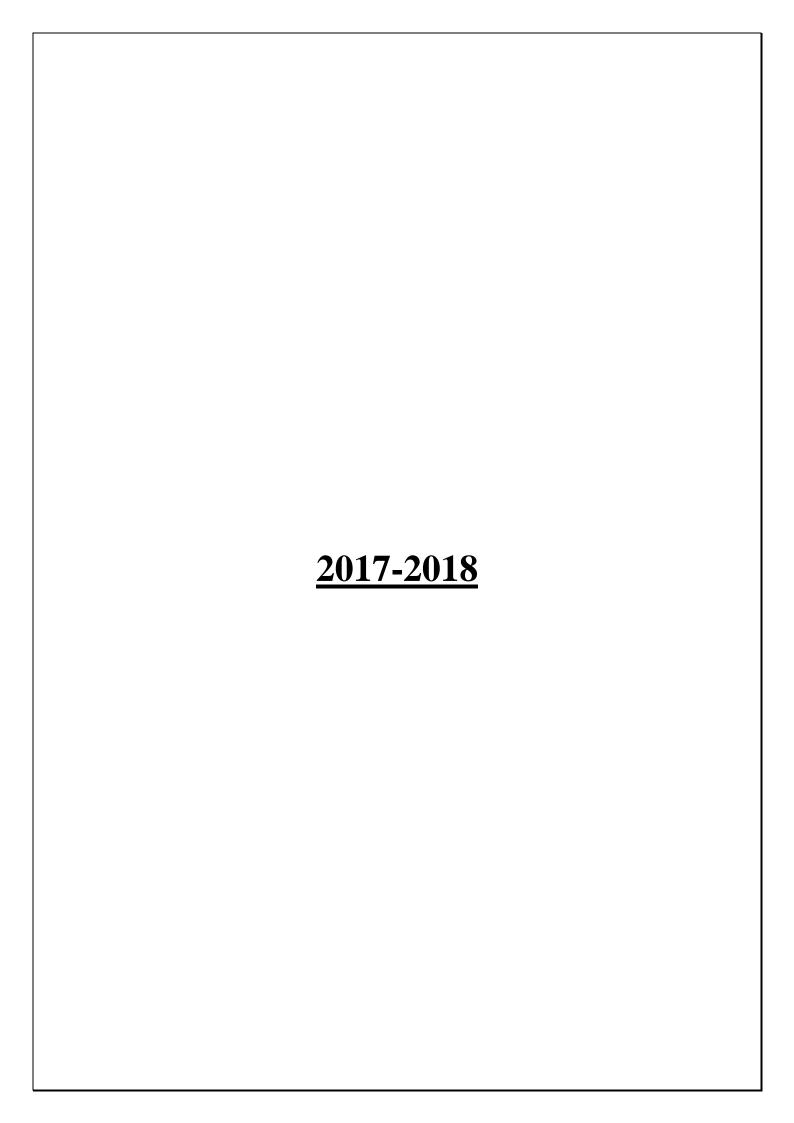
research design in context of engineering problems and Pedagogical analysis have been discussed.

The total participants in the workshop were around 50. The resource persons from GNDEC Ludhianaand

other reputed institutions including D. C. R. Univ. of Sci. and Tech. Murthal, Sonipat, Punjab University

Chandigarh have shared their expertise among the participants.

Chief Coordinator



Completed Registration form along with 1-page write-up (on reasons to attend this course) should be sent by Email to <a href="mailto:gip.prod.gndec@gmail.com">gip.prod.gndec@gmail.com</a>.

Dr. Rupinder Singh Course Coordinator

#### Pf. Manjot Singh Bedi Course Co-Coordinator

Department of Production Engineering Guru Nanak Dev Engineering College, Ludhiana, Punjab, 141006

Please send single email with attachments as:

(a) the 1-page write-up and (b) scanned copy of the filled-in and signed form. The title of the email should be "QIP course on Optimization life enhancement of biomedical implants by additive manufacturing and protective coatings".

#### **IMPORTANT DATES**

Deadline for submitting Application: 21 Aug, 2017 Notification of Acceptance: 28 Aug, 2017 Course Dates: 4 – 8 September, 2017

• Incomplete application forms will not be entertained.

#### **VENUE FOR COURSE**

Seminar Hall, Central Workshop, GNDEC, Ludhiana.

#### **DATE & TIME FOR REGISTRATION**

September 4, 2017, 9 AM at the venue for the course.

#### **ELIGIBILITY**

Faculty members of degree level engineering colleges recognized by AICTE are eligible to attend the course.

#### **COURSE EVALUATION**

Successful participants would be awarded 'Course Completion Certificate'.

#### **REGISTRATION**

There is no registration fee for the course. All short-listed candidates are required to confirm their participation by sending a Cheque/Demand Draft of Rs. 1000/- in the name of "Director, GNDEC, Ludhiana".

The above amount will be refunded to the participant if he/she attends the course. In case a participant does not attend the course, the above amount will be forfeited. Shortlisting and confirmation of eligible candidates will be on a first come first served basis up to a maximum of 30 candidates.

#### TRANSPORT, BOARDING & LODGING

Participants are entitled for II class (Sleeper Class) or AC railway fare to and fro by the shortest route from college to GNDEC, Ludhiana. Accommodation will be provided in the students Hostels or Guest House on sharing basis.

#### **FACULTY COORDINATOR**

Dr. Jasmaninder Singh Grewal

#### **COURSE COORDINATOR**

Dr. Rupinder Singh

#### **COURSE Co-COORDINATOR**

Pf. Manjot Singh Bedi

#### OTHER FACULTY MEMBER

- Dr. G.S. Brar
- Dr. Akshay Girdhar

#### **GUEST FACULTY**

- Dr. Satya Prakash (IIT Roorkee)
- Dr. J.N.Jha (MIT, Bihar).
- Dr. Sandeep Grover (YMCA Fbd.)
- Dr. Buta Singh Sidhu (MRRSPTU Bathinda)
- Dr. Sanjeev Kumar (PEC Chandigarh)
- Dr. IPS Ahuja (Pbi. Univ. Patiala)
- Dr. J.S.Dureja (Pbi. Univ. Patiala)
- Dr. O.P.Singh (BCET Gurdaspur)
- Dr. Dilbag Singh (BCET Gurdaspur)

#### **QIP Short Term Course**

On

# OPTIMIZATION

# Life Enhancement of Bio-Medical Implants by Additive Manufacturing and Protective Coatings

**September 04 - 08, 2017** 



Department of Production Engineering Guru Nanak Dev Engineering College Ludhiana, Punjab – 141006

e-mail: qip.prod.gndec@gmail.com Phone: +91 98722-57575, +91 98035-66002

### **ABOUT THE INSTITUTE**

Guru Nanak Dev Engineering College (An Autonomous College under UGC Act), established in 1956,has been straining persistently in the field of education by comprehending the need for up-liftment of rural youth in highly competitive, technologicallyelevated 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. This college has the privilege of starting Ph.D degree under Quality Improvement Programme (QIP) by AICTE, New Delhi. Apart from offering various Accredited graduate level B.Tech courses vis-a-vis Civil Engineering, Computer Science & Engineering, Electrical Engineering, Electronics & Communication Engineering, Mechanical Engineering, Production Engineering, Information Technology, the institute imparts instruction in eleven Postgraduate M.Tech courses both on regular and part time basis. An excellent platform is provided to the researchers leading to Ph.D degree program.

### **ABOUT THE DEPARTMENT**

The first batch of M.Tech. (Production Engineering) started as part-time programme in 1980 followed by M.Tech. (Production Engineering) full-time programme in 1983 under Mechanical Engineering department. The department was renamed as Department of Production Engineering on January, 2009 and is functioning independently. At present it offers undergraduate and postgraduate courses in Production Engineering. The department has laboratory and workshop facilities with modern sophisticated equipment to carry out research in all areas related to Production Engineering. The faculty actively participates in sponsored research and consultancy work. Both the UG/PG courses have been accredited by NBA (Tier-I) and all the courses offered by department are AICTE approved. The department is having very good pass percentage (in

stipulated time) usually above 95% for UG/PG students. Since 2009, as independent department, Production Engineering is continuously maintaining strong International collaboration with outside world in form of joint research publications, editorial board memberships of reputed International journals.

### **OBJECTIVE OF THE COURSE**

- Application of optimization techniques for life enhancement of bio-medical implants
- Hand on experience for preparation of bio medical implants by additive manufacturing
- Lab Testing of protective coatings as per ASTM standards

### **COURSE CONTENTS**

- 1. Role of optimization for biomedical implants
- 2. Additive manufacturing for bio-medical implants
- 3. Biomedical/Protective coatings
- 4. Design of experiment (various tools for process optimization)
- 5. Case studies on dental/ortho implants.
- 6. Hand on experience for lab testing of implants.

### **COURSE BENEFICIARIES**

Faculty members pursing Ph.D/ Research Scholars

### **BROAD SUBJECT AREA**

Manufacturing

### RELATED DISCIPLINES

Production/Manufacturing/Mechanical/ Bio-medical/ Bio-technology/ CSE/IT/Environment (Interdisciplinary).

**NOTE:** For additional copies of the registration form, use a photocopy of this brochure or type in the format given. For further details:

http://www.gndec.ac.in

### **QIP Short Term Course**

on

### **Optimization**Life Enhancement of Bio-Medical Implants by

Name (in block letters) .

Additive Manufacturing and Protective Coatings

<u>September 04 – 08, 2017</u>

### Registration Form

Designation:
Organization:
Mailing Address :
Age : Sex ( M/F):
Mobile :
Email :
Educational Qualifications:
Prior Exposure to such program: Yes / No
Accommodation in Campus: YES/NO
Signature of Applicant:

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)

Form should be complete otherwise the application will be rejected

### GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA

An Autonomous College u/s 2(f) and 12(B) of UGC Act 1956

Department of Production Engineering

Consolidated report on Faculty Development Program on 'Optimization, Life Enhancement of Bio-Medical Implants by Additive Manufacturing and Protective Coatings'.

The faculty development program sponsored by QIP on 'Optimization, Life Enhancement of Bio-Medical Implants by Additive Manufacturing and Protective Coatings' was organized by the Production Engineering department from 4 – 8 September, 2017. FDP was held under the guidance of Director GNDEC, Ludhiana and HOD Production Engineering.the program was designed for industrialist, medical field representatives, researchers and faculty of Various fields of Engineering, as it was an in terdisciplinary course.

The experts from the various reputed institutes were present to deliver lectures and share their experiences in Bio-Medical implants by additive manufacturing. More than 50 participants from various institutions had attended the program to take benefits of expert talks and enhanced their knowledge in the field of Bio-Medical implants by additive manufacturing and their life enhancement.

### Objectives of the program:

- 1. Application of optimization techniques for life enhancement of biomedical implants.
- 2. Hand on experience for preparation of bio medical implants by additive manufacturing.
- 3. Lab testing of protective coatings as per ASTM standards.

### Sessions of the program:

Session I:

09:15 am - 10:45 am

Tea break (10:45 am - 11:00 am)

Session II:

11:00 am - 12:30 pm

Lunch break (12:30 pm - 01:15 pm)

Session III:

01:15 pm - 02:45 pm

Tea break (02:45 pm - 03:00 pm)

Session IV: 03:00 pm – 04:30 pm

### Course contents:

- · Role of optimization for biomedical implants.
- Additive manufacturing for biomedical implants.
- · Biomedical/protective coatings.
- Design of experiment (various tools for process optimization)
- Case studies on dental/ortho 4D materials.
- Practice session for lab testing as per ASTM standards.

### Speakers:

- Dr. Buta Singh (MRS Punjab Techninal University, Bathinda)
- Dr. Satya Prakash (IIT Roorkee)
- Dr. Bhupinder Singh Bhoop (PU, Chandigarh)
- Dr. IPS Ahuja (Punjabi University, Patiala)
- Dr. JS Dureja (Punjabi University, Patiala)
- Dr. Sanjeev Kumar (PEC, Chandigarh)
- Dr. Sandeep Grover (YMCA, Faridabad)
- Dr. Rupinder Singh (GNDEC, Ludhiana)
- Dr. GS Brar (GNDEC, Ludhiana)

### Organizing Committee:

- Dr. MS Saini (Chief Patron)
- Dr. JS Grewal (Patron)
- Dr. Rupinder Singh (Course Coordinator)
- Er. Manjot Singh Bedi
- Dr. Harpuneet Singh
- Er. Jagdeep Singh
- Er. Gauravdeep Singh
- Er. Paramjit Singh

Er. Kanwalpreet Sahni

Er. Arshpreet Kaur

Er. Gulraj Singh

HODPE

### **ELIGIBILITY**

The FDP is interdisciplinary and is open to all faculty members from CSE, IT, EE, ECE, ME, Production departments and computer science applications. Research Scholars /M.Tech students and industry personnel working in the concerned areas are also eligible.

### **HOW TO APPLY**

Applicants can fill the registration form only in **online mode** available at http://it.gndec.ac.in/fdp\_ro.

After successful registration, pdf form will be generated and applicants are required to download the form and send the form duly signed from sponsoring organization to <a href="mailto:it@gndec.ac.in">it@gndec.ac.in</a> before deadline along with scanned copy of Demand Draft/Cheque.

Last date for receipt of

**Application:** <u>06.10.2017</u>

Date of Intimation

regarding final Selection: 13.10.2017

Brochure can also be downloaded from our website: http://it.gndec.ac.in/fdp\_ro

### **ADDRESS FOR CORRESPONDENCE**

Dr. Amit Kamra (Asstt. Prof.)
Co-Coordinator
Contact: - 98142-29753
Department of Information Technology
Guru Nanak Dev Engineering College
(An Autonomous College u/s 2(f) and 12(B) of
UGC Act, 1956)

Gill Road, Gill Park, Ludhiana-141006, Punjab. Email: - it@gndec.ac.in

#### REGISTRATION

There is no registration fee for the FDP but an amount of Rs 1000 (Refundable) in form of Cheque/DD in favour of Director GNDEC is required. The above amount will be refunded to the participant if he/she attends the FDP. In case a participant does not attend the FDP, the above amount will be forfeited. All shortlisted candidates are required to confirm their participation by submitting duly signed registration form generated online to it@gndec.ac.in

### TRANSPORT, BOARDING & LODGING

All outstation Participants are entitled for  $2^{nd}$  class AC railway fare to and fro by the shortest route from their college to GNDEC, Ludhiana. Limited accommodation will be provided in the students Hostels or Guest House on sharing basis (subject to availability).

### **CHIEF PATRON**

Dr. M.S. Saini

(Director, GNDEC)

### **COORDINATORS**

Dr. K.S. Mann

Coordinator (Professor & HOD- I.T.)

Dr. Amit Kamra

Co-Coordinator (Asstt. Prof.-I.T.)

### **AICTE Sponsored**

**Two Weeks Faculty Development** 



**Programme** 

0n

### Research Opportunities in Medical Imaging, Biomedical Engineering and Health Informatics

OCT 23, 2017-NOV 3, 2017



Department of Information Technology Guru Nanak Dev Engineering College Ludhiana, Punjab-141006

> email: it@gndec.ac.in Contact: -98142-29753

### **ABOUT THE INSTITUTE**

Guru Nanak Dev Engineering College (GNDEC), Ludhiana is one of the oldest and a premier Engineering Institute of India straining persistently in the field of education by comprehending the need for up-liftment of rural youth in highly competitive, technologically elevated society and understanding the thirst for knowledge of students and quenching it in general. The foundation stone of the college was laid by Honorable Dr. Rajendra Prasad Ji, President of India on 8thApril, 1956. The institution runs seven B.Tech., thirteen M.Tech., MBA and MCA FDPs, besides being a QIP centre for Ph.D.

The College is affiliated with I.K. Gujral Punjab Technical University (IKGPTU). The College FDPs are approved by All India Council for Technical Education, New Delhi.

This is the first Engineering College of Punjab, which was conferred Autonomous Status by University Grants Commission(UGC), New Delhi in 2012 under section 2(f) and 12(B) of UGC Act 1956. Institution is accredited by National Assessment and Accreditation Council (NAAC) (A Grade) and TCS. The institute is set up on 88 acres of sprawling pristine land on Ludhiana-Malerkotla highway in Punjab.

### **ABOUT THE DEPARTMENT**

The department of Information Technology in Guru Nanak Dev Engineering College, Ludhiana was established in 2001. The mission of the Department of Information Technology is to impart high quality post graduate and undergraduate education and carry out leading-edge research in the discipline of Information Technology. The department currently runs academic program leading to the award of B.Tech. in Information Technology degree of I.K.G Punjab Technical University Jalandhar. The B.Tech (IT) program of department has been accredited twice by the by NBA.

### ABOUT FDP

By nature, field of Medical Imaging, Biomedical Engineering and Health Informatics is an interdisciplinary endeavor. A faculty development program on Research opportunities in Medical Imaging, Biomedical Engineering and Health Informatics is aimed at introducing the possible research avenues in the field of Biomedical Engineering and will be an opportunity for the participants who are interested in interdisciplinary areas where they can apply their expertise to solve problems in medicine and health care.

### **OBJECTIVE OF THE FDP**

- Gain Insights into the emerging trends and researches in field of Medical Imaging
- Hands on experience of data analytical tools imperative in field of bioinformatics and medical imaging
- Research trends in healthcare and medical industry

### **FDP CONTENTS**

The contents of FDP will address all the current and upcoming issues related to areas of medical imaging, biomedical engineering and health informatics. In addition Hands on training for tools like MATLAB, WEKA, and OCTAVE will also be provided to the participants.

### **RESOURCE PERSON**

Eminent Speakers from IIT/NIT/UIET/GNDEC and doctors from reputed Hospitals will be handling the sessions.

### **AICTE Sponsored**

**Two Weeks Faculty Development Programme** 

on

### Research Opportunities in Medical Imaging, Biomedical Engineering and Health Informatics

Name (in block letters):
Designation:
Department:
Cheque/DD No:
Organization:
Mailing Address:
Age: Gender (M/F):
Mobile:
Email:
Educational Qualifications:
Accommodation Required: Yes/ No
Signature of Applicant:
Sponsorship & signature of Head of the College/

Form should be complete otherwise

Institute (with date & seal)

application will be rejected.

### ALL INDIA COUNCIL FOR TECHNICAL EDUCATION Nelson Mandela Marg, Vasant Kunj, New Delhi - 110 067

F.No. 6-85/RIFD/FDP/Policy-1/2016-17

To

Dated: 6th June 2017

The Drawing and Disbursing Officer, All India Council for Technical Education, Nelson Mandela Marg, Vasant Kunj, New Delhi - 110067,

Release of a sum of Rs. 621000/- being the  $1^{st}$  Installment of the total Grant of Rs. 690000/- for conduct of Faculty Development Programme (FDP) during the financial year 2017-18 - reg.

Sir,

This is to convey the sanction of the Council for payment of Rs. 621000/-(Rupees Six Lakh TwentyOne Thousand Only) as 1st installment out of the total approved grant-in-aid of Rs. 690000 for conduct of FDP on Research opportunities in Medical Imaging, Biomedical Engineering and Health Informatics to GURU NANAK DEV ENGINEERING COLLEGE, GILL PARK, GILL ROAD, LUDHIANA Pin No - 141006 Punjab, under

- The amount of the grant shall be drawn by the Drawing and Disbursing Officer, All India Council for 1. Technical Education on the grant-in-aid bill and shall be disbursed to and credited to the Registrar/ Director/Principal of the institute through RTGS.
- 2. This grant-in-aid is being released in conformity with the terms & conditions as well as norms of the Scheme as already communicated, and also being communicated in this letter.
- The sanctioned amount is debitable to the Major Head 601.9(a) Gen. of the Scheme of Faculty 3. Development Programme and is valid for payment during the financial year 2017-18.
- Funds covered by this grant shall be kept separately and would not be mixed up with other funds. 4.
- The Council or its nominee shall have the right to check/verify the accounts to satisfy that the funds 5. have been utilized for the purpose for which they were sanctioned.
- The Principal and the Coordinator of the institute are requested to verify the correctness of the under 6. mentioned bank account/ RTGS details submitted by them along with the Proposal, in which the grant is being released. In case of any omission the same should be reported to AICTE immediately along with refund of entire grant: -

Institute PAN No.	Bank Name	Bank Branch Name	Bank Branch Address	Account Holder Name	Account Type	Account Number	IFSC Code
AAATN1978L	PUNJAB AND SIND BANK	Gill	Gill, Ludhiana	Director	Saving Account	21100005061 4	PSIB0000021

Contd....2

l. PA ConcerMC

- The University/College/Institute shall maintain proper accounts of the expenditure out of the grants,
- which shall be utilized only on approved items of expenditure. Interest on the sanctioned grant will be reported back to AICTE and may be adjusted against the 7.
- 8. subsequent installment.
- 90% of sanctioned amount to Govt. Institutions and 50% of sanctioned amount as advance to Self-Financing Institutions shall be released on the basis of Approval Letter for 2016-17. Those Institutes/ Colleges, who have already conducted the event after submitting the application in the financial year, 9. shall not be paid any advance payment. They may send the expenditure account and other relevant documents within one month of receipt of this letter for final settlement and reimbursement.
- The grant is intended to cover items of expenditure connected with the Faculty Development Programme such as Boarding & Lodging to the participants, TA to outstation participants, Honorarium 10. to Course Coordinator, Reading material to participants, Honorarium to Resource Persons, TA/DA to resource persons including two outstations resource persons & Working Expenses (reprographic services, postage, transport, daily wages, tea/coffee etc.
- The Council shall sanction a maximum grant of Rupees Seven Lakh only to conduct one Programme. 11. The expenditure under the Heads 'Honorarium to Course Coordinator' and 'Honorarium to Resource Persons' shall not exceed 1% & 20% respectively of the total sanctioned grant for the Programme. However, overall expenditure shall not exceed the funds sanctioned for the Programme.

Type of trainings under FDP shall be as under:

- I. Pedagogical Training
- II. Subject related Training
- III. Training related to Moral Values, Ethics, Behavioural Sciences & Attitude etc.
- Training on Leadership & Faculty Development under U.K. India Education Research initiative (UKIERI)
- The balance amount will be reimbursed to the institutions only on submission of duly audited 12. utilization certificate and other relevant documents.
- The reimbursement of the balance entitled amount of the grant-in-aid shall be released only on receipt 13. of the following documents: -
  - Feedback form in the prescribed proforma.
  - Original Statement of actual expenditure & Utilization Certificate in the prescribed proforma duly (ii) signed by the Head of the institution and countersigned by Registrar/Finance Officer/Govt. Auditor. In case of self-financing/private institutions, Statement of actual Expenditure along with paid vouchers & Utilization Certificate are required to be audited & signed and sealed by a Chartered Accountant endorsing the membership number and complete postal address.
  - Copy of the proceedings and completion report.
  - If programme is not conducted in the period of six months of the issuance of this Offer If programme is not conducted in the partial of the local conducted in this Other Letter, the released amount, along with interest accrued thereon, has to be returned to
- The documents mentioned above must be sent within one month of the completion of the Faculty Development Programme held with approved financial assistance. On receipt of these documents, the 14. Development Programme near with approved managements of tecesps of these documents, the total amount of financial assistance admissible as per the norms shall be worked out and grant-in-aid
- Any unavoidable circumstantial change in the Programme with respect to name of Project Coordinator, Any unavoidable circumstantial change in the constant of the constant of the constant of the council. All such 15. Venue and date for organizing FDF would mandatorny require prior approval of the Council. All such requests should be addressed to AlCTE, in advance, recording the specific reasons for proposed requests should be addressed to AlCLE, in advance, recording the specific reasons for proposed changes, failing which the offer for the grant already issued would be treated as automatically changes, failing which the otter for the grain arready issued would be treated as automatically withdrawn and the financial assistance released in favour of the beneficiary institution shall be

refunded immediately to the Council. Kindly mention the File No. 6-85/RIFD/FDP/Policy-1/2016-17 in your future correspondence.

- The FDP will be organized for 2 weeks with minimum 50 participants and the institute should strictly observe all the terms and conditions contained in the scheme details under AICTE AQIS 2016-17.
- 17. The grant is subject to the adjustment on the basis of Utilization Certificate in the prescribed proforma submitted by the University/College/Institution. Further, the accounts of the institute will be open for test check by the Council or Controller & Auditor General of India or any other officer designated by them.
- 18. The University/College/Institute shall maintain proper accounts of the expenditure out of the grants which shall be utilized only on the approved items of expenditure.
- 19. This Sanction Order may be treated as Offer Letter for all purposes.

Yours sincerely,

(Dileep N Malkhede)

Advisor-I (RIFD)

Copy forwarded for information and necessary action to: -

- 1. Dr. KULWINDER MANN,
  Department of INFORMATION TECHNOLOGY
  GURU NANAK DEV ENGINEERING COLLEGE
  GILL PARK, GILL ROAD, LUDHIANA
  Pin No. 141006
  Punjab
  - 2. THE REGISTRAR / DIRECTOR / PRINCIPAL GURU NANAK DEV ENGINEERING COLLEGE GILL PARK, GILL ROAD, LUDHIANA Pin no. 141006
    Punjab
  - 3. Guard File

# Event Report of 2 week FDP "Research Opportunities in Medical Imaging, Biomedical Engineering and Health Informatics" held from 23/10/2017 -03/11/2017 conducted by IT Department

Information Technology department conducted FDP on o give a brief about this course that started on 23<sup>rd</sup> Oct 2017 where Dr Sukhwinder Singh of UIET was the chief guest. The keynote address of Dr Sukhwinder Singh was based on insights of medical imaging, biomedical engineering and health informatics. An MOU with Conjoint Health care solutions was sgned n FDP for providing research assistance to the M,Tech and PhD Scholars of GNDEC. Dr A S Arora from SLIET Longowal presented his views on his recent research happening in the field of biomedical engineering. Dr. Amit Kamra fromGNDEC talk was on Designing Biometric authentication techniques using MATLAB. To cater the issue of plagiarism, Dr Akshay Girdhar presented a very detailed presentation on how to avoid plagiarism.

The talk of Dr. Vipul Sharma from IKGPTU was very informative as he presented how to write a world class paper. He also explained use of Mendely, how to access various database. Dr. K S Mann gave his ideas on health informatics and how to use HL7 in research purpose. Dr Ajay and Dr Manpreet Singh presented their views on recent trends on Bioinformatics. Dr Mandeep Singh from Thapar University presented his views on Liver Characterization. The participants were provded hands on session to two tools ie.e WEKA and MATLAB. I hope the participants must have gained some practical knowdge from that session. A one day visit was organized to Mayyo Diagnostic and Orison Hospital where Dr Sunil Mittal and his team gave live demonstration of Working of X ray Images, CT

Scan, MRI and Mammography. The FDP is designed to bring Researchers, Academia and Technocrats from different parts of the country to a common gathering for exchanging and sharing the recent developments in the field of Medical imaging, biomedical engineering and health informatics. As the course if of interdiciplnary nature, Dr Rupinder singh of Production department will be presenting a talk on biomedical implants. To inculcate research ideas among young scholars, we have managed to arrange one lecture from Mr Mandeep singh Kwatra who is visiting India from England. Dr Arvind Dhingra gave a talk on MATLAB and its applications. Dr Parminder Singh, share his research ideas on Language processing as machine learning and data mining are two pillars of any research problem. Case studies and practical examples enrich their concept in the field of Medical imaging, Biomedical Engineering, Image Processing, Data mining and it will help them to do better teaching and to conduct research activities at their institutes. HOD presented vote of thanks at valedictory ceremony.

Electrical Engineering	Entrepreneurship & Finances for Small Scale Industry	60	27/10/2017	https://ee.gndec. ac.in/sites/defaul t/files/Key%20In dicator%203.3% 20%281%29.doc x	
Electrical Engineering	Entrepreneurship & Start-ups	60	27/10/2017	https://ee.gndec. ac.in/sites/defaul t/files/Key%20In dicator%203.3% 20%281%29.doc x	

Ref. No. E. E / 7.59

Dated 27 10 17

### CERTIFICATE OF APPRECIATON

This is to appreciate & applaud the efforts of Er. Gaurav Ahluwalia, our alumnus for delivering an expert talk on "ENTERPRENEURSHIP & FINANCESS FOR SMALL SCALE INDUSTRY" to students of 3<sup>rd</sup> year Electrical Engineering on 27<sup>th</sup> October, 2017. We wish him all the best.

HOD (EE) 27/10/17

GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA.

ELECTRICAL ENGINEERING DEPARTMENT

Ref. No. EE/ 750

Dated: 26.10.2017

### NOTICE

There will be seminar on topic. "ENTREPRENEURSHIP and STARTUPS" by Er. Gaurav Ahluwalia (Alumni and an entrepreneur on 27.10.2017 at 10.00 AM in Deptt. Computational Lab. All final year students are required to attend the same.

Elect. Engg. Deptt.

HOD HIN 17

CG.S.SODM)

1. D.N.B.

EVENT REPORT- "Entrepreneurship & Finances for Small Scale Industries",

**ELECTRICAL ENGINEERING DEPARTMENT, DATED: 27/10/17** 

The purpose of the talk delivered on the topic "Entrepreneurship & Finances for small scale

industries", delivered by Er. Gaurav Ahluwalia, alumnus, GNDEC, was to provide an

overview of the important issues and questions in entrepreneurial finance, and to partially

understand how to survey the nascent literature on this topic. Historically, finance scholars

have tended to view entrepreneurship as entirely separate from the field of corporate finance.

Implicit in this approach is the idea that the issues in entrepreneurial finance are sufficiently

different from those faced by public corporations so as to limit the applicability of traditional

finance theory. More recently, however, financial economists have recognized that

entrepreneurial situations are characterized by the same two fundamental problems that form

the basis for much of corporate finance theory: agency problems and information

asymmetries.

Entrepreneurial finance differs from traditional corporate finance only in the sense that the

magnitude of these two problems is larger, thereby requiring contractual solutions that differ

from those typically encountered in larger, more established corporations.

This main purpose of the seminar was to provide an overview of four areas of inquiry within

the entrepreneurial finance literature: (i) alternative sources of capital, (ii) financial

contracting issues, (iii) public policy issues, and (iv) risk and return in private equity

investments. These four areas are not meant to be an exhaustive set of issues but, rather,

represent the primary areas

Instead, Er. Ahluwalia's more modest goal was to survey small scale industries economic

conditions that represent the most important contributions and the "state-of-the-art" thinking

on entrepreneurial finance issues. This approach will necessarily preclude the discussion of

many high-quality economists and students.

Dr. Arvind Dhingra

Event Coordinator & Incharge

Dated: 27/10/2017

EVENT REPORT- "Entrepreneurship & Start-ups", ELECTRICAL ENGINEERING

**DEPARTMENT, DATED: 27/10/17** 

The purpose of the talk delivered on the topic "Entrepreneurship & Startups", delivered by

Er. Gaurav Ahluwalia, alumnus, GNDEC, was to provide An emerging entrepreneurial view

on the ventures with fast growing business, developing and/or subsequently offering an

innovative product, process or service can be termed as a startup company. Startups are

playing a very crucial role in the development of economies at a comparatively faster pace all

around the world. The technological innovation along with process creativity as well as new

product development has given rise to a huge number of startups coming up in the markets in

recent times.

Observing the potential of this fast growing trend, the Indian Government launched a scheme

named Startup India, to encourage and assist the young entrepreneurs in establishment of

startups in the country and outside as well. Startups provide a catalyst ground for the

technological development to build a strong system for nurturing innovation that can drive

sustainable development and generate substantial employment opportunities for taking ahead

the country.

As per Economic survey 2015-2016 tabled by Finance Minister, there are more than 19000

technology enabled startups in India. However, a huge number of startups either fail to run

sustainably or they face investor's exit due to one reason or the other.

Er. Ahluwalia's tried to analyse the survey on statup conditions that represent the most

important contributions and the "state-of-the-art" thinking on entrepreneurial business

issues. This approach will necessarily preclude the discussion of many high-quality

economists and students aspiring startups.

Dr. Arvind Dhingra

Event Coordinator & Incharge

Dated: 27/10/2017

### Guru Nanak Dev Engineering College, Ludhiana An Autonomous College u/s 2(f) and 12(B) of UGC Act 1956) Department of Mechanical Engineering

### **Activity report**

### STC on Finite Element Method for Engineering Applications

The short time course was organized by the mechanical engineering department from December 4<sup>th</sup> to 8<sup>th</sup> December, 2017 on topic **Finite Element Method for Engineering Applications**. The programme was designed especially for the Faculty Members, Research Scholars, and students. It includes numerical calculation method used in many fields of engineering and research and allows efficient and precise modelling the behavior of mechanical, thermal, or other complex systems. This method separates a complex geometry into a network of nodes and elements of simpler shape and equations, called a mesh. 55 participants were present in this session.



#### COURSE OBJECTIVE

Low power has emerged as a principal theme in With electronics industry remarkable success and growth of the class of personal computing devices (portable desktops, audio- and video-based multimedia products) and wireless communications systems (personal digital assistants and personal communicators), demand of high-speed computation and complex functionality with low power consumption has increased in the past, the major concerns of the VLSI designer were area, performance, cost and reliability, power consideration was mostly of only secondary importance. In recent years, however, this has begun to change and power is being given comparable weight along with area and speed considerations. Thus, the need for low power has caused a major paradigm shift where power dissipation has become as important a consideration as performance and area.

Many issues are faced by designers at architectural, logic, circuit and device levels which are required to be overcome by efficient techniques. This course will address the latest trends and future challenges that must be met to design low power, high performance systems.

### COURSE CONTENTS

- VLSI Design cycle
- · Challenges at various design levels
- Power Estimation Methods
- Power reduction techniques at each design level
- Effects of scaling
- CMOS Analog design
- Digital circuit design
- CAD Techniques
- Nanoscale Semiconductor Devices
- Hands-on session on tools like Cadence and TCAD.
- Future Challenges

#### IMPORTANT DATES

Submission of Registration form by 01.12.2017 Acceptance Notification by 02.12.2017

> DATE & VENUE FOR REGISTRATION 4.12.2017 (9AM) at TCC Seminar Hall, GNDEC, Ludhiana

### CONTACT DETAILS

Dr. Sandeep Singh Gill Professor & Head, Department of Electronics & Communication Engineering, Guru Nanak Dev Engineering College, Gill Road, Gill Park, Ludhiana, Punjah - 141006 E-mail:gndec.ece.fdp@gmail.com Phone: 0161-5064576(O)

### PATRON

Principal, Guru Nanak Dev Engineering College, Ludhiana

### COORDINATOR

Dr. Sandeep Singh Gill

### ORGANISING COMMITTEE

Pf. Narwant Singh Dr. Balwinder Singh Dr. Munish Rattan Dr. Baljeet Kaur Pf. Harminder Kaur Pf. Gurjot Kaur

Pf. Daljit Singh Pf. Sapanjot Kaur Pf. Simranjit Kaur Pf. Nanzia Makkar Pf. Nishu Kansal

Pf. Palwinder Kaur

Pf. Jasmeet Kaur

Pf. Navneet Kaur Pf. Gurpurneet Kaur Pf. Tarandeep Singh Pf Chahat Jain Pf. Kuldeepak Singh

Pf. Harminder Kaur Aulakh

TWO WEEK AICTE SPONSORED FACULTY DEVELOPMENT PROGRAMME ON

### "Design Challenges in Low Power VLSI Design"

04.12.2017 to 16.12.2017





Coordinator Dr. Sandeep Singh Gill

Organized by Department of Electronics and Communication Engineering

### Guru Nanak Dev Engineering College Ludhiana

Gill Road, Gill Park, Ludhiana, Punjab - 141006 E-mail: gndec.ece.fdp@gmail.com Phone: 0161-5064576(O)

### ABOUT THE INSTITUTE

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. This college has the privilege of starting Ph.D degree under Quality Improvement Programme (QIP) by AICTE. New Delhi Apart from offering various accredited graduate level B.Tech courses, the institute also imparts thirteen Postgraduate courses both on regular and part time basis. An excellent platform is provided to the researchers leading to Ph.D degree program.

### ABOUT THE DEPARTMENT

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 most diversification initiative by the college, 25 years after its establishment. The department is currently running NBA Accredited UG and PG courses in Electronics and Communication Engineering and has around 15 scholars enrolled for doctorate in areas like Antenna Design, VLSI, Optical communication etc. 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 of the last 20 years and manning pivotal positions in Telecom operators in India, South East Asia, Pacific region and Africa. In the last two years, as a part of an academically autonomous system, the department has been taken numerous quality initiative including revamping of syllabi so that it is in tune with the outcome based system as proposed in the Washington Accord. The

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

#### 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 <a href="mailto:gndec.ece.fdp@gmail.com">gndec.ece.fdp@gmail.com</a>.

Shortlisting and confirmation of eligible candidates will be on a first come first served basis. Incomplete application forms will not be entertained. Registration forms should reach the coordinator by 27.11.2017.

### 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 and other related disciplines are invited.

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

### TRANSPORT, BOARDING & LODGING

Participants are entitled for 11 class (Sleeper Class) or AC railway fare to and fro by the shortest route from college to GNDEC, Ludhiana. Accommodation will be provided in the students Hostels or Guest House on sharing basis.

TWO WEEK AICTE SPONSORED
FACULTY DEVELOPMENT PROGRAMME
ON

### "Design Challenges in Low Power VLSI Design"

#### Registration Form

Name (in block letters):

Gender:

Qualification:

Designation/Department:

Organization:

Address:

Mobile:

Email:

Accommodation in Campus: YES / NO

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)

### FDP Report

AICTE sponsored two week faculty development programme on 'Design Challenges in Low Power VLSI Design' was organised by Department of ECE in Guru Nanak Dev Engineering College. Ludhiana from 4<sup>th</sup> December, 2017 to 16<sup>th</sup> December, 2017. The aim of this course was to share the theoretical as well as practical concepts related to design issues in the field of low power VLSI. Chief Guest Prof. Shailendra Jain, Director SLIET addressed the participants and appreciated the initiative of conducting such kind of events which help in filling the gap between institute and industry by providing an industry focussed shape to research and teaching.

Sh. II. S. Jatana, Scientist and Group Head- Design & Process Group, Semi Conductor Laboratory, Department of Space, Govt. of India, Mohali delivered expert lectures on design of MOSFETs and various biasing techniques. Lab sessions on circuit-level tool Cadence virtuoso were conducted by Er. Uday, Scientist, SCL Mohali. Dr. Ashwani Rana from NIT, Hamirpur delivered expert talk on power evaluation in circuits, novel methodologies for MOSFET devices like FinFETs. Dr. Vinayak Hande from IIT Roorkee discussed design concepts of CMOS analog amplifiers and challenges in designing of low power analog integrated circuits. Dr. Balwinder Raj, Assistant Professor, NIT Jalandhar shared his expertise on various challenges in nanoscale era, FinFETs design etc. Dr. Kanav Kahol explained various innovations related to low power design and demonstrated various applications.

Faculty members from GNDEC, Ludhiana delivered expert lectures on various topics like optimization techniques, design of multigate MOSFETs and FinFET SRAM etc. Lab sessions on TCAD tool, one of the device specific tools, were conducted in detail by Er. Amit Saini, Cadre Design Systems. Around 50 participants from within and outside the institute attended this programme and were benefitted from the knowledge shared by experts. They found this course to be very informative as they got opportunity to interact with industry and academic experts.

Course Coordinator



### ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਇੰਜੀਨੀਅਰਿੰਗ ਕ**ਂ** Guru Nanak Dev Engineering College

An Autonomous College U/S 2(f) and 12(B) of UGC Act the

Institute Accredited by NAAC (A Grade) under UGC & TCS

AICTE Approved, Punjab Govt. Aided Status, Affiliated to IKG Punjab Tech. University. Jalandhar
ISO: 9001:2008 Certified • UG Programmes accredited by IEI

Ref. No. | ECE | 713

Dated \_\_\_\_\_

### TO WHOM SO EVER IT MAY CONCERN

This is to certify that Er. Gurjot Kaur Walia, Assistant Professor, Guru Nanak Dev Engineering College, Ludhiana conducted a Lab Session on "VHDL" on 7.12.2017 during the AICTE Sponsored Two week Faculty Development Programme on "Design Challenges in Low Power VLSI Domain" being organized by Department of Electronics & Communication Engineering, Guru Nanak Dev Engineering College, Ludhiana.

HOD (ECE)

(3)



### ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਇੰਜੀਨੀਅਰਿੰਗ ਕਾਲ Guru Nanak Dev Engineering College

An Autonomous College U/S 2(f) and 12(B) of UGC Act 1955

Institute Accredited by NAAC (A Grade) under UGC & TCS

AICTE Approved, Punjab Govt. Aided Status, Affiliated to IKG Punjab Tech. University, Jalandhar.

ISO: 9001:2008 Certified • UG Programmes accredited by IEI

Ref. No. ECE - 737

Dated \_\_\_\_\_\_\_

### TO WHOM SO EVER IT MAY CONCERN

This is to certify that Sh. Uday Khambete, Scientist/Enginer 'E' SCL contributed in the following sessions on 11<sup>th</sup> and 12<sup>th</sup> December 2017 during the AICTE Sponsored Two week Faculty Development Programme on "Design Challenges in Low Power VLSI Design" being organized by Department of Electronics & Communication Engineering. Guru Nanak Dev Engineering College, Ludhiana from 4<sup>th</sup> December to 16<sup>th</sup> December. 2017.

- 1. Installation of PDK
- 2. Lab session on Virtuoso
- 3. Lab session on Layout using Virtuoso

HOD (ECE)

(3)



Dr. Narwant Singh Grewal honouring the expert Dr. Ashwani Rana, NIT Hamirpur.





Er. H.S.Jatana, Sceintist, SCL Mohali sharing his expertise



Inauguration ceremony of course



Er. Uday Khambete , Scientist, SCL Mohali sharing expertise on Cadence tool



Dr. Vinayak Hande, IIT Ropar delivering expert lecture

Completed Registration form along with 1-page write-up (on reasons to attend this course) should be sent by Email to fdp.prod.gndec@gmail.com.

**Dr. Rupinder Singh Course Coordinator** 

Pf. Manjot Singh Bedi Course Co-Coordinator Department of Production Engineering Guru Nanak Dev Engineering College, Ludhiana, Punjab, 141006

Please send single email with attachments as:

1-page write-up and scanned copy of the filled-in and signed form. The subject title of the email should be "Waste management by additive manufacturing".

### IMPORTANT DATES

Deadline for submitting Application: 15 Nov, 2017 Notification of Acceptance: 30 Nov, 2017 Course Dates: 11-23 Dec. 2017

Incomplete application forms will not be entertained. VENUE FOR COURSE

Seminar Hall, Central Workshop, GNDEC, Ludhiana.

### **DATE & TIME FOR REGISTRATION**

December 11, 2017, 9 AM at the venue for the course.

### **ELIGIBILITY**

Faculty members of degree level engineering colleges recognized by AICTE are eligible to attend the course.

### COURSE EVALUATION

Successful participants would be awarded 'Course Completion Certificate'.

#### REGISTRATION

There is no registration fee for the course. All short-listed candidates are required to confirm their participation by sending a Cheque/Demand Draft of Rs. 1000/- in the name of "Principal, GNDEC, Ludhiana".

The above amount will be refunded to the participant if he/she attends the course. In case a participant does not attend the course, the above amount will be forfeited. Shortlisting and confirmation of eligible candidates will be on a first come first served basis up to a maximum of 30 candidates.

### TRANSPORT, BOARDING & LODGING

Participants are entitled for II class (Sleeper Class) or AC railway fare to and fro by the shortest route from college to GNDEC, Ludhiana. Accommodation will be provided in the students Hostels or Guest House on sharing basis.

#### CHIEF PATRON

Principal, GNDEC, Ludhiana

#### **PATRON**

Dr. Jasmaninder Singh Grewal (HOD.P.E)

#### COURSE COORDINATOR

Dr. Rupinder Singh, Prof. P.E

#### COURSE Co-COORDINATOR

Pf. Manjot Singh Bedi, A.P., P.E

#### **ORGANIZING COMMITTEE**

**Dr. Harpuneet Singh** 

Pf. Jagdeep Singh

Pf. Arshpreet Kaur

Pf. KanwalpreetSahni

Pf. Gauravdeep Singh

Pf. Parmiit Singh,

Pf.Gulraj Singh

and supporting staff

AICTE sponsored
Faculty Development Programme

# Waste Management by Additive Manufacturing

December 11 - 23, 2017



### **Department of Production Engineering**

Guru Nanak Dev Engineering College Ludhiana, Punjab - 141006

e-mail: fdp.prod.gndec@gmail.com Phone: +91 98722-57575, +91 98035-66002

### **ABOUT THE INSTITUTE**

Guru Nanak Dev Engineering College (An Autonomous College under UGC Act), established in 1956, has been straining persistently in the field of education by comprehending the need for upliftment of rural vouth 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. This college has the privilege of starting Ph.D degree under Quality Improvement Programme (QIP) by AICTE, New Delhi. Apart from offering various Accredited graduate level B.Tech courses vis-a-vis Civil Engineering, Computer Science & Engineering, Electrical Engineering, Electronics & Communication Engineering, Mechanical Engineering, **Production** Engineering, Information Technology, the institute imparts instruction in eleven Postgraduate M.Tech courses both on regular and part time basis. An excellent platform is provided to the researchers leading to Ph.D degree program.

### ABOUT THE DEPARTMENT

The first batch of M.Tech. (Production Engineering) started as parttime programme in 1980 followed by M.Tech. (Production Engineering) full-time programme in 1983 under Mechanical Engineering department. The department was renamed as Department of Production Engineering on January, 2009 and is functioning independently. At present it offers undergraduate and postgraduate courses in Production Engineering. The department has laboratory and workshop facilities with modern sophisticated equipment to carry out research in all areas related to Production Engineering. The faculty actively participates in sponsored research and consultancy work. Both the UG/PG courses have been accredited by NBA (Tier-I) and all the courses offered by department are AICTE approved. The department is having very good pass percentage (instipulated time) usually above 95% for UG/PG students. Since 2009, as independent department, Production Engineering is continuously maintaining strong International collaboration with outside world in form

joint research publications, editorial board memberships of reputed International journals.

### **OBJECTIVE OF THE COURSE**

- Application of additive manufacturing techniques for waste management.
- Hand on experience for preparation of additive manufacturing for management of waste.

#### **COURSE CONTENTS**

- E-waste management
- Solid waste management
- Plastic solid waste management
- Unitary, Binary, Tertiary and Quatrini Techniques for Plastic solid waste management
- Functional prototypes using Plastic solid waste
- Additive manufacturing Route for Plastic solid waste management
- Investment casting for Plastic solid waste.

#### **COURSE BENEFICIARIES**

Faculty members /Ph.D Research Scholars/ Industry personnel/ Field engineer.

#### RELATED DISCIPLINES

Production/Manufacturing/Mechanical/ Bio-medical/ Bio-technology/ CSE/IT/Civil/Environment (Interdisciplinary).

NOTE: For additional copies of theregistration form, use a photocopy of this brochure or type in the format given. For further details: http://www.gndec.ac.in

Form should be complete otherwise the application will be rejected

# AICTE sponsored Faculty Development Programme (FDP)

## Waste Management by Additive Manufacturing

**Registration Form** 

Name (in block letters) :	
Designation :	
Organization :	
Mailing Address :	
Age : Sex ( M/F):	_
Mobile :	
Email:	
<b>Educational Qualifications:</b>	
Prior Exposure to such program:	Yes / No
Accommodation in Campus: YES / NO	
Signature of Applicant:	

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)

### GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA

An Autonomous College u/s 2(f) and 12(B) of UGC Act 1956

Department of Production Engineering

# Consolidated report on Faculty Development Program on 'Waste Management by Additive Manufacturing'.

The faculty development program sponsored by AICTE on 'Waste Management by Additive Manufacturing' was organized by the Production Engineering department from 11 – 23 December, 2017. FDP was held under the guidance of Director GNDEC, Ludhiana and HOD Production Engineering, the program was designed for industrialist, environmentalist, researchers and faculty of Various fields of Engineering, as it was an in terdisciplinary course.

The experts from the various reputed institutes were present to deliver lectures and share their experiences in waste management and additive manufacturing. More than 45 participants from various institutions have attended the program to take benefits of expert talks and enhanced their knowledge in the field of waste management using additive manufacturing.

### Objectives of the program:

- To enhance the knowledge of participants in the field of additive manufacturing.
- 2. Waste management of plastic waste using additive manufacturing techniques.
- 3. Practice session on FDM to make samples using recycled plastic.
- Knowledge related to blending of plastics to enhance their mechanical, electrical and thermal properties.

### Sessions of the program:

Session I:

09:15 am - 10:45 am

Tea break (10:45 am - 11:00 am)

Session II:

11:00 am - 12:30 pm

Lunch break (12:30 pm - 01:15 pm)

Session III:

01:15 pm - 02:45 pm

Tea break (02:45 pm - 03:00 pm)

Session IV:

03:00 pm - 04:30 pm

Level &

### Key points of FDP:

- · Types of waste and its management
- Introduction to additive manufacturing
- Various additive manufacturing techniques
- Management of waste using additive manufacturing
- Cost reduction in waste management
- E-waste management
- Solid waste management
- Investment casting for Plastic solid waste
- Blending of plastics for enhancing the properties as compare to matric materials
- Practice session using FDM setup

### Speakers:

- Dr. Buta Singh (MRS Punjab Techninal University, Bathinda)
- Dr. Sukhpal Singh (Punjabi University, Talwandi Sabo campus)
- Dr. IPS Ahuja (Punjabi University, Patiala)
- Dr. JS Dureja (Punjabi University, Patiala)
- Dr. OP Singh (BCET, Gurdaspur)
- Dr. Sanjeev Kumar (PEC, Chandigarh)
- Dr. Sandeep Grover (YMCA, Faridabad)
- Dr. Amit Kamra (GNDEC, Ludhiana)
- Dr. Akshay Girdhar (GNDEC, Ludhiana)
- Dr. Rupinder Singh (GNDEC, Ludhiana)

### Organizing Committee:

- Dr. MS Saini (Chief Patron)
- Dr. JS Grewal (Patron)
- Dr. Rupinder Singh (Course Coordinator)
- Er. Manjot Singh Bedi (Course Co-coordinator)
- Dr. Harpuneet Singh
- Er. Jagdeep Singh

Ser. R

Er. Kanwalpreet Sahni

Er. Paramjit Singh

Er. Gauravdeep Singh

Er. Arshpreet Kaur

Er. Gulraj Singh

Course Coordinator

HOD PE

# GURU NANAK DEV ENGINEERING COLLEGE LUDHIANA (Department of Electronics & Communication Engineering) (An Autonomous College under UGC Act.)

No. ECE/ 929

Date: 24 61 18

### **NOTICE**

An expert demo on "CST Software" will be held in Computational Lab at 10.30 AM on 25.01.2018. The demo will be delivered by №s. Jyoti, Electronic, Ahmedabad. All faculty members are requested to attend.

HQD (ECE)

Cc to: -

- 1. All faculty members
- 2. Office copy.

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### ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਇੰਜੀਨੀਅਰਿੰਗ ਕਾਲਿਜ Guru Nanak Dev Engineering College

An Autonomous College U/S 2(f) and 12(B) of UGC Act 1956

95/01/2018

NBA Accredited UG Programmes under Tier-I (Washington Accord), "A" Grade NAAC Accredited, TCS Accredited AICTE Approved, Punjab Govt. Aided Status - Affiliated to I. K. Gujral Punjab Technical University, ISO: 9001:2008 Certified

Ref. No. | ECE | 938

Dated 25.01.2018

Mr. Chandresh Dhote, Application Engg., Jyoti Electronic, Ahmedabad, Gujarat has given demonstration on "CST Software" in ECE department, GNDEC, Ludhiana on 25.01.2018.

We highly appreciate his efforts.

HOD (EÇE)

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Resource Person: Chandrigh

Tyon Electronics, Ahmedated

Faculty and Student Name 1. Narwant Singh (AP, ECE) 5-64 2. Balwinder Singh Malwel (AP, ECE) BiMalute MUNISM RATPAN (AP, EZE) Mush Rose 3 Chahat Jain (AP, ECE) Chalaton Simonyil Kam (AP, ECE) 5. Jashanjet Kaur (MTech, ECE) Josho-jet Kans Plathjet Kara (MTech ECE) Rathjet kans Courpret Trave (M. Tech & & E) Guysreel Kan Kumacep Kaur Kirandeep Kaur (M. Tech ECE) nawimanjit touce. Haveimenzil tau CM-Tech ECE) T 0. Harpreit Kam Gill (M. Tech ECE) Harpreet Koun gill

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## Department of Electronics and Communication Engineering Guru Nanak Dev Engineering College, Ludhiana

### ACTIVITY REPORT

Name of Activity: Demo on "CST Software"

Date: 25-01-2018

Report: A demonstration of CST Microwave Studio was held in Computational Lab of ECE Department on 25.01.2018. The talk was delivered by Mr. Chandresh Dhote, Application Engineer, Jyoti Electronics, Ahmedabad. Mr. Chandresh highlighted the features of CST Microwave studio for use in Antennas and Microwave applications. Five faculty members and six students of M. Tech. ECE attended this demonstration.

Dr. Munish Rattan

Incharge, Microwave Engineering Lab

Munish Ration.

### COURSE OBJECTIVE

Low Power has emerged as a Principal theme in today's electronics industry. With the remarkable success and growth of the class of personal computing devices (portable desktops, audio- and video-based multimedia products) and wireless communications systems (personal digital assistants and personal communicators), demand of high-speed computation and complex functionality with low power consumption has increased. In the past, the major concerns of the designer were area, performance, cost and reliability; power consideration was mostly of only secondary importance. In recent years, however, this has begun to change and power is being given comparable weight along with area and speed considerations. Thus, the need for low power has caused a major paradigm shift where power dissipation has become as important a consideration as performance and area.

Many issues are faced by designers at architectural, logic, circuit and device levels which are required to be overcome by efficient techniques. This course will address the latest trends and future challenges that must be met to design low power, high performance electronic systems.

### COURSE CONTENTS

- Low power high performance electronic systems
- Design and Analysis of Antennas for low power applications
- Low power VLSI circuits & systems
- . Low power electronics for Signal & Image Processing
- Wireless & Optical communication for low power applications
- Hands-on sessions on relevant tools

### IMPORTANT DATES

Submission of Registration form by 05.03.2018
Acceptance Notification by 07.03.2018

### DATE & VENUE FOR REGISTRATION

12.03.2018 (9AM) at Testing & Consultancy Cell (TCC) Seminar Hall, GNDEC, Ludhiana

### CONTACT DETAILS

Dr. Sandeep Singh Gill

Professor & Head

Department of Electronics & Communication Engg.

Guru Nanak Dev Engineering College

Gill Road, Gill Park, Ludhiana,

Punjab - 141006

E-mail:gipece@gmail.com

Phone: 0161-5064576(O)

### PATRON

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

### COORDINATOR

Dr. Sandeep Singh Gill (HOD ECE)

### ORGANISING COMMITTEE

Prof. Ameeta Seehra Prof. Narwant Singh Dr. Balwinder Singh Dr. Munish Rattan Dr. Baljeet Kaur Prof. Harminder Kaur

Prof. Gurjot Kaur

Prof. Navneet Kaur

Prof. Gurnumeet Kaur

Prof. Chahat Jain
Prof. Kuldeepak Singh
Prof. Harminder Kaur Aulakh

Prof. Jasmeet Kaur Prof. Daljit Singh

Prof. Sapanjot Kaur

Prof. Simranjit Kaur Prof. Naazia Makkar

Prof. Nishu Kansal

ONE WEEK QIP SHORT TERM COURSE ON



# Low Power Applications in Electronics"

(12th-16th March, 2018)



COORDINATOR

Dr. Sandeep Singh Gill

ORGANISED BY

### Department of ELECTRONICS & COMMUNICATION ENGINEERING

### Guru Nanak Dev Engineering College

Gill Road, Ludhiana, Punjab-141006

Phone: 0161-5064576 (O) E-mail: gipece@gmail.com

#### GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA

Department of Electronics & Communication Engineering

## One week QIP Short Term Course on

# "DESIGN ISSUES IN LOW POWER APPLICATIONS IN ELECTRONICS" (March 12-16, 2018)

#### **Schedule**

	12 <sup>th</sup> March, 2018 (Monday)	13 <sup>th</sup> March, 2018 (Tuesday)	14 <sup>th</sup> March, 2018 (Wednesday)	15 <sup>th</sup> March, 2018 (Thursday)	16 <sup>th</sup> March, 2018 (Friday)
9am-10am	Registration	Session-1	Session-1	Session-1 Dr. Balwinder Singh	Carrier 1
10am-11am	Keynote Address  Dr. Sandeep Singh Gill GNDEC, Ludhiana	Dr. Brajesh Kumar Kaushik IIT Roorkee	Dr. Baljeet Kaur GNDEC Ludhiana	Dhaliwal GNDEC Ludhiana	Session-1 Dr. Amit Kamra GNDEC Ludhiana
11am-11:30am	HIGH TEA	TEA	TEA	TEA	HIGH TEA
11:30am-1:30pm	<u>Session-1</u> Dr. Sam Darshi IIT Ropar	Session-2 Dr. Brajesh Kumar Kaushik IIT Roorkee	Session-2 Dr. Akshay Girdhar GNDEC Ludhiana	Session-2 Dr. Simranjit Singh Punjabi University Patiala	<u>Session-2</u> Dr. Sujata Pal IIT Ropar
1:30pm-2:30pm	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
2:30pm-4:30pm	<u>Session-2</u> Dr. Brajesh Kumar Kaushik IIT Roorkee	Session-3 Dr. Munish Rattan GNDEC Ludhiana	Lab Session Er. Navneet Kaur, Er. Gurpurneet Kaur GNDEC Ludhiana	Session-3 Dr. Simranjit Singh Punjabi University Patiala	
4:30pm-4:45pm	TEA	TEA	TEA	TEA	



Photo" Dr. Brajesh Kumar Kaushik (Resource Person), IIT Roorkee



Photo: Dr. Sam Darshi (Resource Person), IIT Ropar



Photo: Lab session on TCAD tool – By Er. Navneet Kaur and Er. Gurpurneet Kaur (Resource Persons) from GNDEC, Ludhiana.

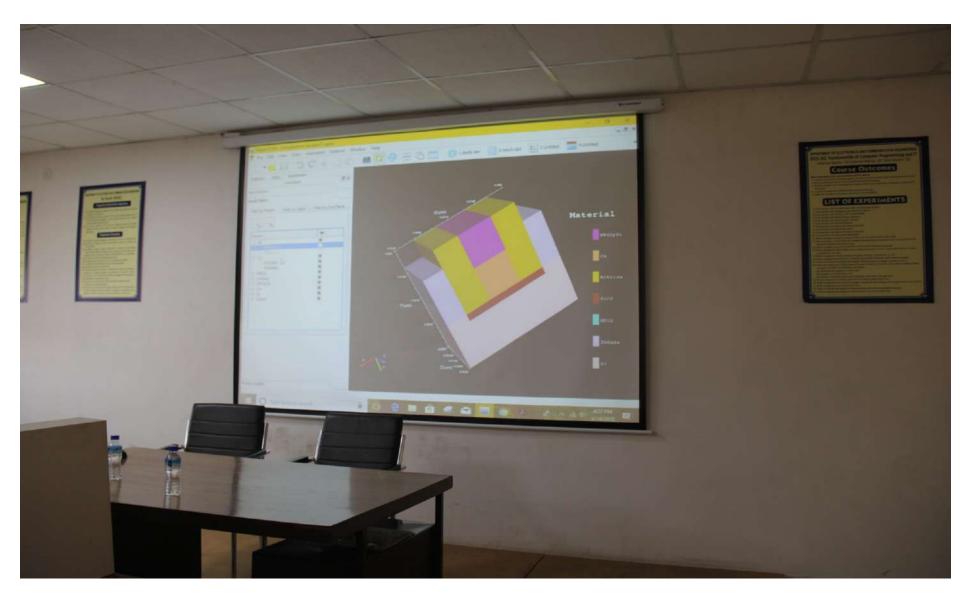


Photo: Lab session on TCAD tool – By Er. Navneet Kaur and Er. Gurpurneet Kaur (Resource Persons) from GNDEC, Ludhiana.



Photo: Participants of STC



Photo: Valedictory session of STC

#### Report on

# One week QIP sponsored Short Term Course on "Design Issues in Low Power Applications in Electronics" held from March 12-16, 2018

Short Term Course on "Design Issues in Low Power Applications in Electronics" from March 12-16. Low power has emerged as a principal theme in today's electronics industry. With the remarkable success and growth of the class of personal computing devices (portable desktops, audio- and video-based multimedia products) and wireless communications systems (personal digital assistants and personal communicators), demand of high-speed computation and complex functionality with low power consumption has increased. In the past, the major concerns of the designer were area, performance, cost and reliability; power consideration was mostly of only secondary importance. In recent years, however, this has begun to change, and power is being given comparable weight along with area and speed considerations. Thus, the need for low power has caused a major paradigm shift where power dissipation has become as important a consideration as performance and area.

Many issues are faced by designers at architectural, logic, circuit and device levels which are required to be overcome by efficient techniques. This course address the latest trends and future challenges that must be met to design low power, high performance electronic systems. Few topics covered in this course are Low Power VLSI design and interconnects, Technique for low power devices: Paradigm of current and upcoming wireless sensors networks etc. The total participants in the workshop were around 40. The resource persons from GNDEC Ludhiana and other reputed institutions including HT Roorkee.

pr /

Chief Coordinator

#### GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA

#### Department of Information Technology

No: IT/36/116

Dated: 5/2/18

QIP Coordinator

Guru Nanak Dev Engineering College,

Ludhiana

Sir,

This is in reference to the QIP course on "Challenges and opportunities in Medical Image Processing" sanctioned to us vide RK98/1042 dated 4/8/2017.

In this context, we wish to conduct the course from 7<sup>th</sup> March 2018 to 11<sup>th</sup> March 2018 (05 days). We also want to make a slight change in the title i.e. "Insights of Image Processing and their Recent Trends".

Dr. Akshay Girdhar, Professor (IT) and Dr. Amit Kamra, Assistant Professor (IT) will be the coordinators for the above course.

This is for your kind information and consent.

HOD (IT)

#### **ELIGIBILITY**

The STC is interdisciplinary and is open to all faculty members of degree level engineering colleges from CSE, IT, EE, ECE, ME Production departments, Math's, Physics and computer science applications departments. Research Scholars and industry personnel working in the concerned areas are also eligible.

#### **HOW TO APPLY**

Applicants can fill the registration form only in **online mode** available at http://it.gndec.ac.in/STC\_ro.

After successful registration, pdf form will be generated and applicants are required to download the form and send the form duly signed from sponsoring organization to amit\_kamra@gndec.ac.in before deadline along with scanned copy of Demand Draft/Cheque.

Last date for receipt of

**Application:** <u>28.02.2018</u>

Date of Intimation

regarding final Selection: <u>02.03.2018</u>

Brochure can also be downloaded from our website: http://it.gndec.ac.in/STC\_ro

#### **ADDRESS FOR CORRESPONDENCE**

Dr. Amit Kamra (Asstt. Prof.) Contact: - 98142-29753 Department of Information Technology

Gill Road, Gill Park, Ludhiana-141006, Punjab. Email: - amit\_kamra@gndec.ac.in

#### REGISTRATION

There is no registration fee for the STC but an amount of Rs 1000 (Refundable) in form of Cheque/DD in favour of Principal GNDEC is required. The above amount will be refunded to the participant if he/she attends the STC. In case a participant does not attend the STC, the above amount will be forfeited. All shortlisted candidates are required to confirm their participation by submitting duly signed registration form generated online to amit\_kamra@gndec.ac.in

#### TRANSPORT, BOARDING & LODGING

All outstation Participants are entitled for normal Bus fare/ $2_{nd}$  class AC railway fare to and fro by the shortest route from their college to GNDEC, Ludhiana. Limited accommodation will be provided in the students Hostels or Guest House on sharing basis (subject to availability).

#### **CHIEF PATRON**

Dr. Sehijpal Singh

(Principal, GNDEC)

#### **Convener**

Dr. K.S. Mann, HOD (IT)

#### **Coordinators**

Dr. Akshay Girdhar, Professor (IT)

Dr. Amit Kamra, Asstt. Prof (IT)

### **QIP Short Term Course**



On

# Insights of Image Processing and their Recent Trends

March 7, 2018- March 11, 2018

#### Organized by

Department of Information Technology Guru Nanak Dev Engineering College Ludhiana, Punjab-141006

> Email: amit\_kamra@gndec.ac.in Contact: -98142-29753

#### **ABOUT THE INSTITUTE**

Guru Nanak Dev Engineering College (GNDEC), Ludhiana is one of the oldest and a premier Engineering Institute of India straining persistently in the field of education by comprehending the need for up-liftment of rural youth in highly competitive, technologically elevated society and understanding the thirst for knowledge of students and quenching it in general. The foundation stone of the college was laid by Honorable Dr. Rajendra Prasad Ji, President of India on 8th April, 1956. The institution runs seven B.Tech., thirteen M.Tech., MBA and MCA besides being a QIP centre for Ph.D.

The College is affiliated with I.K. Gujral Punjab Technical University (IKGPTU). The College STCs are approved by All India Council for Technical Education, New Delhi. This is the first Engineering College of Punjab, which was conferred Autonomous Status by University Grants Commission(UGC), New Delhi in 2012 under section 2(f) and 12(B) of UGC Act 1956. Institution is accredited by National Assessment and Accreditation Council (NAAC) (A Grade) and TCS. The institute is set up on 88 acres of sprawling pristine land on Ludhiana-Malerkotla highway in Punjab.

#### **ABOUT THE DEPARTMENT**

The department of Information Technology in Guru Nanak Dev Engineering College, Ludhiana was established in 2001. The mission of the Department of Information Technology is to impart high quality post graduate and undergraduate education and carry out leading-edge research in the discipline of Information Technology. The department currently runs academic program leading to the award of B.Tech. in Information Technology degree of I.K.G Punjab Technical University Jalandhar. The B.Tech (IT) program of department has been accredited twice by the NBA.

#### **ABOUT FDP**

This STC aims at providing strong theoretical background along with practical experience in the field of Image Processing (IP). It will lay stress on visualization and analysis of the images that could be efficiently done with the help of image processing tools. In addition, the STC will enable participants to get an idea of several applications of the image processing that could be further useful in their future research endeavor.

#### **MAJOR COURSE CONTENTS**

- Fundamental of IP (in spatial and Frequency domain).
- Image Degradation and restoration
- Digital Image Filtering
- Segmentation and Object Localization.
- Hands-on Experiences in MATLAB
- Research areas of IP

#### **RESOURCE PERSON**

**Eminent Speakers from** 

- IKGPTU, Jalandhar
- Thapar Univ. Patiala
- UIET, Chandigarh.
- GNDEC, Ludhiana

will be handling the sessions.

#### **QIP Short Term Course**

#### Insights of Image Processing and their Recent Trends

Name (in block letters):
Designation:
Department:
Cheque/DD No:
Organization:
Mailing Addross
Mailing Address:
Age: Gender (M/F):
Mobile:
Email:
Educational Qualifications:
Accommodation Required: Yes/ No
Signature of Applicant:
Sponsorship & signature of Head of the

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

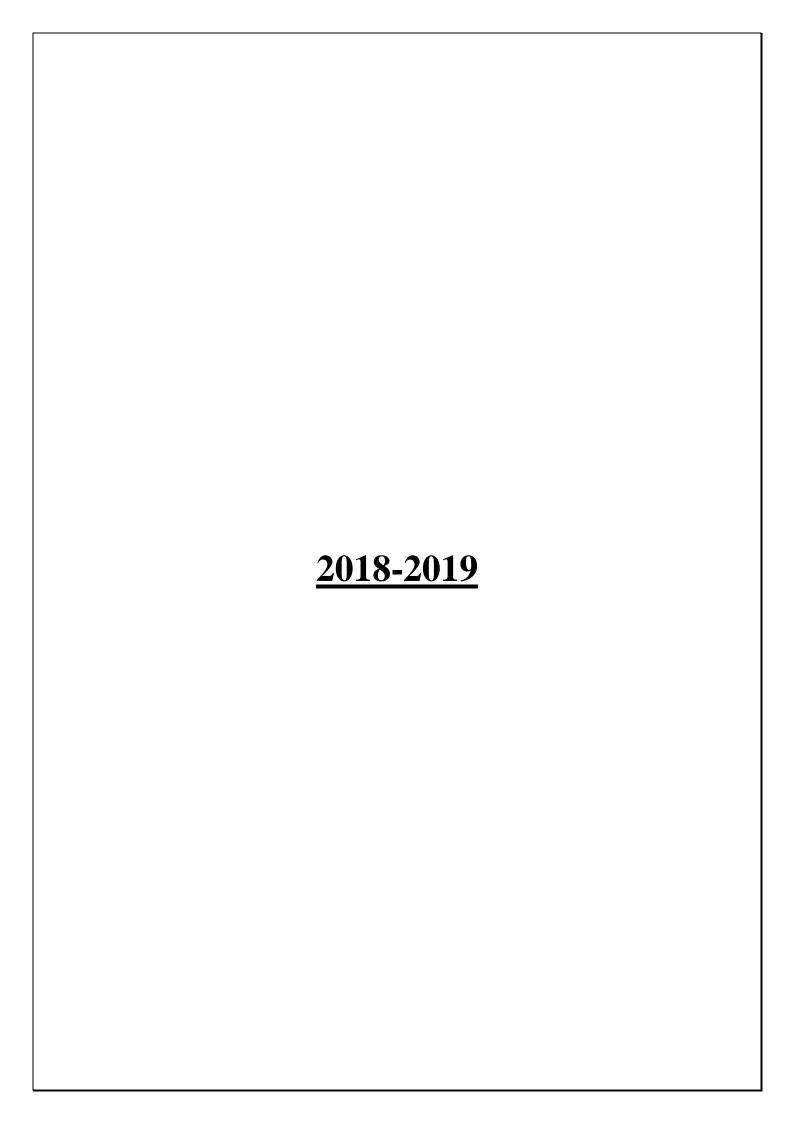
Form should be complete otherwise application will be rejected.

# Event Report of 1 week FDP "Insights of Image Processing and their recent trends" held from 07/03/2018 - 11/03/2018 conducted by IT Department.

Information Technology department conducted FDP on o give a brief about this course that started on 7 March 2018 where Dr Akshay Girdhar from GNDEC started with basic of Image Processing. Dr. Anjali Goyal from GNIMT Ludhiana lecture was based on CBIR, medical imaging, biomedical engineering and health informatics. Dr Jagroop Singh, from DAVIET Jalandhar spoke about image compression. Mr. Jagdeep singh from GNDEC gave hands on session for MATLAB and weka. To cater the issue of plagiarism, Dr Akshay Girdhar presented a very detailed presentation on how to avoid plagiarism.

Dr. Vipul Sharma from IKGPTU gave lecture on how to use mendeley and writing a world class paper. He also explained use of Mendely, how to access various database. Dr. Jitender Vermani, CSIO Chandigarh spoke about image resolution and his research on cancer diagnosis. Dr Mandeep Singh from Thapar University presented his views on Liver Characterization. The FDP is designed to bring Researchers, Academia and Technocrats from different parts of the country to a common gathering for exchanging and sharing the recent developments in the field of Medical imaging. Dr. Navdeep Kanwal from Punjabi university spoke on image forensics. On the final day Dr. Savita Gupta, director UIET presented some latest case studies and practical examples that enrich concept in the field of Medical imaging, Biomedical Engineering. Principal GNDEC and HOD (IT) thanks all the participants for their keen learning on image processing applications.





#### GURU NANAK DEV ENGINEERING COLLEGE LUDHIANA

(Department of Electronics & Communication Engineering)

No. ECE/ 1747

Date: 1719115

#### NOTICE

The department of ECE in organizing a three day Entrepreneurship Awareness Camp (EAC) in co-ordination with STEP, GNDEC, Ludhiana. This EAC is compulsory for all students of B.Tech (ECE), 7<sup>th</sup> semester (section B), M.Tech (ECE) I<sup>st</sup> semester (Full time), and M.Tech (ECE) III<sup>rd</sup> Sem Full -time students. So all students of these class are required to be present to attend the EAC during 9.45 am to 3 pm on 18-09-2018, 20-09-2018 and 21-09-2018 in STEP. GNDEC, Ludhiana. The following teachers shall accompany the students during these days.

Date	Time Schedule	Name of Teachers
18/09/2018	10 AM to 12:30 PM	Pf.Baljeet Kaur, Pf.Kuldeepak Singh
	12:30 PM to 3 PM	Pf.Narwant Singh Grewal, Pf.Gurjot Kaur
20/09/2018	10 AM to 12:30 PM	Pf.Narwant Singh Grewal, Pf.Baljeet Kaur
	12:30 PM to 3 PM	Pf.Gurjot Kaur, Pf.Gurpurneet Kaur
21/09/2018	10 AM to 12:30 PM	Pf.Baljeet Kaur, Pf.Avneet Kaur
	12:30 PM to 3 PM	Pf.Narwant Singh Grewal, Pf.Kuldeepak Singh

HOD (ECE)

cc:-

1.Principal for information

2.DNB

3.All Concerned Teachers

4.Prof GJK/NM for record

5.Office Copy

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## GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA

(Department of Electronics & Communication Engineering)

No. 1754/1

Date: 21.09, 2018

#### Activity Report

Three day Entrepreneurship Awareness Camp (EAC) was organized by the department of ECE in coordination with Science & Technology Entrepreneurs' Park (STEP). The target audience was final year students of B.Tech and all M.Tech students of ECE department. Department faculty members accompanied the students. The objective of this three-day camp was to enhance the entrepreneurial skills of the students. Students were exposed to different aspects of entrepreneurship, including opportunity guidance, services offered by agencies of support system etc. A visit to the industries located in the STEP-GNDEC was also arranged to bring the students in direct touch with practicing entrepreneurs.

Around 60 students participated in this camp and benefitted from it. They came to know about various practical aspects of setting up a business and becoming an entrepreneur. Resource persons Dr. Arvind Dhingra, Director, STEP and Dr. Surinderbir Singh (Expert) guided the students and made them aware of various opportunities and support provided to them at an initial stage and further, the whole process. They motivated the students to make use of available facilities and come forth with their ideas and utilize their skills. They were guided on how to make and present a business plan. Dr. V.J. Rai, CA Shalini and Sh. R. K. Parmar were the experts from MSME who shared their expertise with the students.

On the last day of camp, certificates were distributed to the participating students. Overall, it was a great learning experience for the students as well as the faculty members.

HOD (ECE)



Students visiting the industries located within STEP campus and interacting with entrepreneurs



Students visiting the industries located within STEP campus and interacting with entrepreneurs



Students interacting with entrepreneurs



Expert Dr. Surinderbir Singh interacting with and motivating the students



Group photo on the conclusion day of 3 day Camp



Dr. Arvind Dhingra, Director, STEP and Dr. Surinderbir Singh, Expert giving away the certificates to participants



Dr. Arvind Dhingra, Director, STEP and Dr. Surinderbir Singh, Expert giving away the certificates to participants



Expert interacting with the students



Expert interacting with students

Completed Registration form along with 1-page write-up (on reasons to attend this course) should be sent by Email to <a href="mailto:singhrupinder@gndec.ac.in">singhrupinder@gndec.ac.in</a>

Dr. Rupinder Singh Course Coordinator

# Pf. Manjot Singh Bedi Course Co-Coordinator

Department of Production Engineering Guru Nanak Dev Engineering College, Ludhiana, Punjab, 141006

Please send single email with attachments as:

(a) the 1-page write-up and (b) scanned copy of the filled-in and signed form. The title of the email should be "QIP course on Tribological analysis of four dimensional printed engineering materials".

#### **IMPORTANT DATES**

Deadline for submitting Application: 14 Nov., 2018

(Scanned copy via Email only)

Notification of Acceptance: 15 Nov., 2018 Course Dates: 19 – 24 Nov., 2018

• Incomplete application forms will not be entertained.

#### **VENUE FOR COURSE**

Seminar Hall, Central Workshop, GNDEC, Ludhiana.

#### **DATE & TIME FOR REGISTRATION**

Nov. 19, 2018, 9 AM at the venue for the course.

#### **ELIGIBILITY**

Faculty members (Engg. discipline) of degree level engineering colleges recognized by AICTE/UGC/MHRD are eligible to attend the course. Research scholars and Industry/ R&D personal will also be considered subject to seats availability.

#### **COURSE EVALUATION**

Successful participants would be awarded 'Course Completion Certificate'.

#### **REGISTRATION**

There is no registration fee for the course. All short-listed candidates are required to confirm their participation by sending a Cheque/Demand Draft of Rs. 1000/- in the name of "PRINCIPAL, GNDEC, Ludhiana".

The above amount will be refunded to the participant if he/she attends the course. In case a participant does not attend the course, the above amount will be forfeited. Shortlisting and confirmation of eligible candidates will be on a first come first served basis up to a maximum of 30 candidates.

#### TRANSPORT, BOARDING & LODGING

Participants are entitled for II class (Sleeper Class) or AC railway fare to and fro by the shortest route from college to GNDEC, Ludhiana. Accommodation will be provided in the students Hostels or Guest House on sharing basis.

#### **CHIEF PATRON**

Dr. Sehijpal Singh

#### **FACULTY COORDINATOR**

Dr. Jasmaninder Singh Grewal

#### **COURSE COORDINATOR**

Dr. Rupinder Singh

#### **COURSE Co-COORDINATOR**

Pf. Manjot Singh Bedi

#### **GUEST FACULTY**

- Dr. O.P.Singh (BCET Gurdaspur)
- Dr. Sandeep Grover (YMCA Fbd.)
- Dr. Buta Singh Sidhu (MRRSPTU Bathinda)
- Dr. Harpreet Singh (IIT Ropar)
- Dr. Dilbag Singh (BCET Gurdaspur)
- Dr. Sanjeev Kumar (PEC Chandigarh)
- Dr. IPS Ahuja (Pbi. Univ. Patiala)
- Dr. G.S.Brar (NIT, U.K)
- Dr. Ajay Batish (TIET, Patiala)
- Dr. Dixit Garg (NIT, KKR)
- Dr. J.S.Dureja (Pbi. Univ. Patiala)

#### **QIP Short Term Course**

On

## TRIBOLOGICAL ANALYSIS OF FOUR DIMENSIONAL PRINTED ENGINEERING MATERIALS

Nov. 19 – 24, 2018



Department of Production Engineering Guru Nanak Dev Engineering College Ludhiana, Punjab – 141006

e-mail: singhrupinder@gndec.ac.in Phone: +91 98722-57575, +91 98035-66002

#### **ABOUT THE INSTITUTE**

Guru Nanak Dev Engineering College (An Autonomous College under UGC Act), established in 1956,has been straining persistently in the field of education by comprehending the need for up-liftment 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. This college has the privilege of starting Ph.D degree under Quality Improvement Programme (QIP) by AICTE, New Delhi. Apart from offering various Accredited graduate level B.Tech courses vis-a-vis Civil Engineering, Computer Science & Engineering, Electrical Engineering, Electronics & Communication Engineering, Mechanical Production Engineering, Information Engineering, Technology, the institute imparts instruction in eleven Postgraduate M.Tech courses both on regular and part time basis. An excellent platform is provided to the researchers leading to Ph.D degree program.

#### **ABOUT THE DEPARTMENT**

The first batch of M.Tech. (Production Engineering) started as part-time programme in 1980 followed by M.Tech. (Production Engineering) full-time programme in 1983 under Mechanical Engineering department. The department was renamed as Department of Production Engineering on January, 2009 and is functioning independently. At present it offers undergraduate and postgraduate courses in Production Engineering. The department has laboratory and workshop facilities with modern sophisticated equipment to carry out research in all areas related to Production Engineering. The faculty actively participates in sponsored research and consultancy work. The PG Prod. Engg. has been accredited by NBA (Tier-I) and all the courses offered by department are AICTE approved. The department is having very good pass percentage (in stipulated time) usually above 95% for UG/PG students. Since 2009, as independent department, Production Engineering is continuously maintaining strong International collaboration with outside world in form of joint research publications, editorial board memberships of reputed International journals.

#### **OBJECTIVE OF THE COURSE**

- Tribological analysis of four dimensional printed thermoplastic composites
- Application of optimization techniques for four dimensional printed engineering materials
- Hand on experience for preparation of bio medical implants of thermoplastic composites by additive manufacturing
- Lab Testing of protective coatings, tribological analysis as per ASTM standards

#### **COURSE CONTENTS**

- 1. Role of optimization for biomedical implants
- 2. Four dimensional printing of thermoplastic composites
- 3. Biomedical/Protective coatings and tribological analysis
- 4. Design of experiment (various tools for process optimization)
- 5. Case studies on dental/ortho implants.
- 6. Hand on experience for lab testing of implants.

#### **COURSE BENEFICIARIES**

Faculty members pursing Ph.D/ Research Scholars

#### **BROAD SUBJECT AREA**

Manufacturing, Additive manufacturing

#### **RELATED DISCIPLINES**

Production/Manufacturing/Mechanical/ Bio-medical/ Bio-technology/ CSE/IT

**NOTE:** For additional copies of the registration form, use a photocopy of this brochure or type in the format given. For further details:

http://www.pe.gndec.ac.in www.rupindersinghresearch.com **QIP Short Term Course** 

on

### TRIBOLOGICAL ANALYSIS OF FOUR DIMENSIONAL PRINTED ENGINEERING MATERIALS

November 19 – 24, 2018

#### **Registration Form**

Name (in block letters):
Designation :
Organization:
Mailing Address :
Age : Sex ( M/F):
Mobile:
Email :
Educational Qualifications:
Prior Exposure to such program: Yes / No
Accommodation in Campus: YES/NO
Signature of Applicant:

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)

Form should be complete otherwise the application will be rejected

# QUALITY IMPROVEMENT PROGRAMME FOR THE

## YEAR 2018-19 QIP SHORT TERM COURSE

		AR 2010-17 QII BITORT TELLIN COURSE	
1.	Title of the Course	Tribological analysis of four dimensional printed engineering materia	IS
2.	Broad subject area	Manufacturing	
3.	Related disciplines	Production/Manufacturing/Mechanical/ Bio-medical/ Bio-tech	nology/
٥.	Related disciplines	CSE/IT/Environment (Interdisciplinary)	
4.	Whom will the	Faculty members pursing Ph.D/ Research Scholars	
7.	course benefit?	. acany	
5.	Objectives of the	Material development for 4D printing	dditing
	course	Hand on experience for preparation of 4D print by a	danive
		manufacturing	
		Tribological analysis by using erosion and wear studies	¥
		<ul> <li>Lab Testing of functional prototypes as per ASTM standards</li> </ul>	
6.	Course Contents	1 Role of 4D printed functional prototypes	
		2. Additive manufacturing for 4D printed components	
		3 Tribological analysis	
		4. Design of experiment (various tools for process optimization)	
		5 Case studies on dental/ortho 4D materials	
		6. Hand on experience for lab testing as per ASTM standards	
7.	<b>Faculty Coordinator</b>	Dr. J.S.Grewal	
8.	Other Faculty	Dr. Rupinder Singh	
	Member	Dr. Harpuneet Singh	
		Dr. Akshay Girdhar	
		Dr. Harwinder Singh	
		Dr. Jatinder Kapoor	
9.	Guest Faculty	<ul> <li>Dr. Satya Prakash (IIT Roorkee)</li> </ul>	
		<ul> <li>Dr. N.S.Vyas (IIT Kanpur)</li> </ul>	
		<ul> <li>Dr. Harpreet Singh (IIT Ropar)</li> </ul>	
		<ul> <li>Dr. Bhupinder Singh Bhoop (PU Chandigarh)</li> </ul>	
		<ul> <li>Dr. Sandeep Grover (YMCA Fbd.)</li> </ul>	
		<ul> <li>Dr. Buta Singh Sidhu (MRRSPTU Bathinda)</li> </ul>	
		<ul> <li>Dr. Sanjeev Kumar (PEC Chandigarh)</li> </ul>	
		<ul> <li>Dr. IPS Ahuja (Pbi. Univ. Patiala)</li> </ul>	
10.	Proposed No. of	30	
	participants		
11.	Duration of course	5 Days (Tuesday to Saturday)	
12.	Preferred dates of	Oct. 9-13, 2018	
	course		
Vame	of Course Coordinator	Dr. Rupinder Singh (Production Engineering)	
& Dep	partment		
		Dr. Rupinder Singh (Production Engineering)	
	e Coordinator		anie a
Recon	nmendation of HOD	The course will be useful for Ph.D research scholars and faculty pur	suing
		Ph.D.Recommended for kind considerations.	9
		. ~	

Chairman/HOD (P.E)

#### GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA

An Autonomous College u's 2(t) and 12(B) of UGC Act 1956

Department of Production Engineering

# Consolidated report on Faculty Development Program on 'Tribological Analysis on Four Dimensional Printed Engineering Materials'.

The faculty development program sponsored by QIP on 'Tribological Analysis on Four Dimensional Printed Engineering Materials' was organized by the Production Engineering department from 9 – 13 October, 2018. FDP was held under the guidance of Principal GNDEC, Ludhiana and HOD Production Engineering the program was designed for industrialist, medical field representatives, researchers and faculty of Various fields of Engineering, as it was an interdisciplinary course.

The experts from the various reputed institutes were present to deliver lectures and share their experiences in Four dimensional printing of engineering materials. More than 40 participants from various institutions had attended the program to take benefits of expert talks and enhanced their knowledge in the field of four dimensional printing.

#### Objectives of the program:

- 1. Material development for 4D printing
- 2. Hands on experience for preparation of 4D print by additive manufacturing.
- Tribological analysis by using erosion and wear studies.
- Lab testing of functional prototypes as per ASTM standards.

#### Sessions of the program:

Session I: 09:15 am - 10:45 am

Tea break (10:45 am - 11:00 am)

Session II: 11:00 am - 12:30 pm

Lunch break (12:30 pm - 01:15 pm)

Session III: 01:15 pm - 02:45 pm

Tea break (02:45 pm - 03:00 pm)

Session IV: 03:00 pm - 04:30 pm

#### Course contents:

- Role of 4D printed functional prototypes.
- · Additive manufacturing for 4D printed components.
- Tribological analysis.
- Design of experiment (various tools for process optimization)
- · Case studies on dental/ortho 4D materials.
- Practice session for lab testing as per ASTM standards.

#### Speakers:

Dr. Buta Singh (MRS Punjab Techninal University, Bathinda)

Dr. Satya Prakash (IIT Roorkee)

Dr. Bhupinder Singh Bhoop (PU, Chandigarh)

Dr. IPS Ahuja (Punjabi University, Patiala)

Dr. JS NS Vyas (IIT Kanpur)

Dr. Sanjeev Kumar (PEC, Chandigarh)

Dr. Sandeep Grover (YMCA, Faridabad)

Dr. Harpret Singh (IIT Ropar)

Dr. Rupinder Singh (GNDEC, Ludhiana)

Dr. JS Grewal (GNDEC Ludhiana)

#### **Organizing Committee:**

Dr. JS Grewal (Patron)

Dr. Rupinder Singh (Course Coordinator)

Er. Manjot Singh Bedi

Dr. Harpuneet Singh

Er. Jagdeep Singh

Er. Kanwalpreet Sahni

Er. Arshpreet Kaur

Er. Gulraj Singh Er, Gurleen Singh HOD PE

# LUDHIANA Tribune

**LUDHIANA | TUESDAY | 1 JANUARY 2019** 

# COLLEGE NOTES Seminar on artificial intelligence

Ludhiana: A five-day hands-on practice session in the form of short term course (STC) commenced at Guru Nanak Dev Engineering College, Ludhiana. This quality improvement programme (QIP) STC titled "Artificial Intelligence (AI), Big Data and HPC Aligned Applications - A Modern Approach of Computing" was inaugurated in consultancy seminar hall. Dr Sukhwinder Singh, director, Computer Centre, Panjab University, Chandigarh, was the chief guest and a keynote speaker. Dr Sukhwinder pointed out various innovative ideas implemented at industry and government level related to Al and high performance computing, Ramandeep Singh Suri, who was the guest of honour, elaborated role of social media and cloud computing, Suri shared his experience and motivated the audience. Dr Kuldeep Kumar from Dr BR Ambedkar National Institute of Technology, Jalandhar, discussed topics titled "Practical approach to research methodologies and Industry-academic research trends in computing". He demonstrated the contents by sharing live examples. Dr Kiran Jyoti, HoD, and faculty coordinator shared her views on social network analysis and big data deluge.







Attendance Sheet (QIP Short Term Course on AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing During Dec. 31st 2018 – Jan. 04th 2019 by the Dept. of Info. Tech., GNDEC Ludhiana)

Registration for the Course on Dated 31.12.2018

			0		
S. No.	Mr./ Ms./   Participant Name		Designation	Affiliation	Signature with Date
1	Dr.	Amit Kamra	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	As 31/12/18
2	Er.	Birpal Kaur	Assistant Professor	GNA University, Phagwara	
3	Er.	Dinesh Anand	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	Anonel
4	Er.	Divya Sharma	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	Stuffnerm
5	Er.	Gitanjali	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	Africali.
6	Er.	Gurjit Kaur	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	Company of the same of the sam
7	Er.	Gurjot Singh	Assistant Professor	Malwa College, Samrala	Guysser
8	Er.	Hanit Karwal	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	Chi
9	Er.	Harjot Kaur Gill	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	(not
10	Er.	Harpeet Kaur	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	
11	Er.	Harsimran Kaur	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	Hous Envior faur
12		Jagdeep Singh	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	B
13		Jasmine Kaur	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	Low
14		K.S. Mann	Professor	Guru Nanak Dev Engineering College, Ludhiana	- Lan

Attendance Sheet (QIP Short Term Course on AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing During

Dec. 31st 2018 – Jan. 04th 2019 by the Dept. of Info. Tech., GNDEC Ludhiana)

Registration for the Course on Dated 31.12.2018

			Registration for	the Course on Bated 211222	
S. No.	Dr./ Er./ Mr./ Ms./ Mrs.	Participant Name	Designation	Affiliation	Signature with Date
15	A soigtant Professor Guru Nanak Dev Engineering College, Ludhiana		V 50		
16	Er.	Kanwalpreet Singh Sidhu	Assistant Professor	Bhutta College of Engineering and Technology, Ludhiana	N. 20
17	Er.	Kapil Kumar	Assistant Professor	Lingaya's Vidyapeeth, Faridabad	Karil Kump 12/18
18	Er.	Karamjit Singh Gill	Assistant Professor	Bhutta College of Engineering and Technology, Ludhiana	
19	Mr.	Karanbir Singh	CEO	Up2Mark Technologies Pvt. Ltd.	Karanta
	Dr.	Kiran Jyoti	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	18
20		Mandeep Kaur	Assistant Professor	Khalsa College for Women, Ludhiana	mxam 12/18
21	Er.	Mandeep Kaur	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	mander pr
22	Er.	Navpreet Kaur	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	Naupiekanz
23	Er.	Nidhi Sharma	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	N
24			Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	
25	Er.	Nitish Sharma		Guru Nanak Dev Engineering College, Ludhiana	- Com
26	Dr.	Pankaj Bhambri	Assistant Professor		0 1 10
27	Ms.	Parminder Kaur	Assistant Professor		
28	Er.	Prabhjot Kaur	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	grasyot.

Attendance Sheet (QIP Short Term Course on AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing During Dec. 31st 2018 – Jan. 04th 2019 by the Dept. of Info. Tech., GNDEC Ludhiana)

Registration for the Course on Dated 31.12.2018

			Registration for	the Course on Dated 31.12.2016	
S. No.	Dr./ Er./ Mr./ Ms./ Mrs.	Participant Name	Designation	Affiliation	Signature with Date
29	Er.	Prabhjot Kaur	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	Nabhyar
30	Mr.	Puneet Singh	Director	Up2Mark Technologies Pvt. Ltd.	Princet Since
31	Er.	Rajni Puri	Assistant Professor	Gujranwala Guru Nanak Institute of Management & Technology, Ludhiana	Lafre
32	Er.	Ravinder Kaur	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	
33	Er.	Rupinder Kaur	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	der
34	Er.	Sachin Bagga	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	ti
35	Er.	Samreet Kaur Gosal	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	00
36	Er.	Sandeep Kumar Singla	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	104 31.12.18
37	Er.	Sartinderpal Singh	AP (CP)/ CP, Computer Centre	Guru Nanak Dev Engineering College, Ludhiana	Cald
38		Shifa Grover	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	Shiza Guou.
39		Shivani Arora Abrol	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	8
40		Sidharth Jain	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	2
		Sumeet Kaur Sehra	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	45
41	0.50	Sunanda Lal	Assistant Professor	Gujranwala Guru Nanak Institute of Management & Technology, Ludhian	1

Registration for the Course on Dated 31.12.2018

S. No.	Dr./ Er./ Mr./ Ms./ Mrs.	Is./ Participant Name Designation		Affiliation	Signature with Date
43	Er.	Sunil Aggarwal	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	
44	Er.	Swaranjit Singh	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	Swarond Lingh.
45	Ms.	Taranpreet Kaur	Assistant Professor	Mata Gujri College, Fatehgarh Sahib	Margatia 18
46	Dr.	V.J. Rai	Principal	Bhutta College of Engineering and Technology, Ludhiana	
47	Dr.	Vikas Singla	Assistant Professor	Malout Institute of Management & Information Technology, Malout	8
47	Er.	Yadvir Kaur	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	Yours

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing
Date: 31st December 2018 (Monday)

S.No.		Name of the Participant	Designation		Day 1 (Signatures)	
				Session-1.1 (11-12:30pm)	Session-1.2 (1:15-2:45pm)	Session-1.3 (3-4:30pm)
1	Dr.	Amit Kamra	Assistant Professor	A	, A.	A
-2	Er.	Birpal Kaur	Assistant Professor	0	Do	(Ce
3	Er.	Dinesh Anand	Assistant Professor	TA		72
4	Er.	Divya Sharma	Research Scholar	Diya suga	Diag Shan	Stuga Snar
5	Er.	Gitanjali	Research Scholar	Tolyali.	- Tryal	- Salmal.
6	Er.	Gurjit Kaur	Assistant Professor	17	la-	bor '
7	Er.	Gurjot Singh	Assistant Professor	and a	4826	581
8	Er.	Hanit Karwal	Assistant Professor	1ch	1 Oh	1 Ou
9	Er.	Harjot Kaur Gill	Assistant Professor	Ton.	Per	the
10	Er.	Harpeet Kaur	Assistant Professor	Hambled Kor	Harpitat Kon	Morphut Kr
11	Er.	Harsimran Kaur	Research Scholar	Housemoran teus	Housemoran Laus	Housinvan Jours
12	Er.	Jagdeep Singh	Assistant Professor	The	T	An '
13	Er.	Jasmine Kaur	Assistant Professor	2000	, other	, Dan
14	Dr.	K.S. Mann	Professor	SP	1	
15	Dr.	Kamaljit Kaur	Assistant Professor	Kyr	wei8	1288
16	Er.	Kanwalpreet Singh Sidhu	Assistant Professor			1
17	Er.	Kapil Kumar	Assistant Professor	Karjil Kumar	Kapil Kuman	Lapil Lumas

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing Date: 31st December 2018 (Monday)

S.No.		Name of the Participant	Designation		Day 1 (Signatures)	
				Session-1.1 (11-12:30pm)	Session-1.2 (1:15-2:45pm)	Session-1.3 (3-4:30pm)
18	Er.	Karamjit Singh Gill	Assistant Professor			
19	Mr.	Karanbir Singh	CEO	Karanting	Caranging!	Karandi A.
20	Dr.	Kiran Jyoti	Assistant Professor	1)	0/	10
21	Er.	Mandeep Kaur	Assistant Professor	NK.	WY	MX O
22	Er.	Mandeep Kaur	Research Scholar	Mandler	Mandey	1) andely
23	Er.	Navpreet Kaur	Research Scholar	Kam	Cham	O four.
24	Er.	Nidhi Sharma	Assistant Professor	wide Brame,	Bug Farm	Wellig Laure
25	Er.	Nitish Sharma	Research Scholar			14.4
26	Dr.	Pankaj Bhambri	Assistant Professor	- Talon	- Farm	Lagran
27	Ms.	Parminder Kaur	Assistant Professor	A D_	(A)	10
28	Er.	Prabhjot Kaur	Research Scholar	N.		9
29	Er.	Prabhjot Kaur	Assistant Professor	grathiotica	Prabhjat K	Paddystker
30	Mr.	Puneet Singh	Director	Puncet Star	June Sour	Puncel 8in
31	Er.	Rajni Puri	Assistant Professor	- 02	9/	8
32	Er.	Ravinder Kaur	Assistant Professor		_	
33	Er.	Rupinder Kaur	Assistant Professor	dr	dy	Live
34	Er.	Sachin Bagga	Assistant Professor	Ja	2	the
35	Er.	Samreet Kaur Gosal	Assistant Professor			

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing Date: 31st December 2018 (Monday)

S.No.		Name of the Participant	Designation		Day 1 (Signatures	
4-1				Session-1.1 (11-12:30pm)	Session-1,2 (1:15-2:45pm)	Session-1.3 (3-4:30pm)
36	Er.	Sandeep Kumar Singla	Assistant Professor	100	NA.	184
37	Er.	Sartinderpal Singh	AP (CP)/ CP, Computer Centre	Cash	( with	Catha
38	Er.	Shifa Grover	Research Scholar	Shop Grown	Shi La Guorn	Shofa Grown.
39	Er.	Shivani Arora Abrol	Assistant Professor	<b>®</b> 1	8	B
40	Er.	Sidharth Jain	Assistant Professor	1	2	Y
41	Dr.	Sumeet Kaur Sehra	Assistant Professor	The state of the s	40	Br
42	Ms.	Sunanda Lal	Assistant Professor	Stell	flall	Stall
43	Er.	Sunil Aggarwal	Research Scholar			-
44	Er.	Swaranjit Singh	Research Scholar	Sucomplitsingn	Susconamort singh.	Swarmortsingh
45	Ms.	Taranpreet Kaur	Assistant Professor	Marin	Marcon	Monard
46	Dr.	V.J. Rai	Principal			
47	Dr.	Vikas Singla	Assistant Professor	952	82	842
48	Er.	Yadvir Kaur	Assistant Professor	Yadan	Yadvid	Yodyli

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing Date: 01st January 2019 (Tuesday)

Venue: Consultancy Seminar Hall, Guru Nanak Dev Engineering College Ludhiana

S.No.		Name of the Participant	Designation		Day 2 (S	Signatures)	Residence of the second
				Session-2.1 (09.00 <sub>7</sub> 10:30am)	Session-2.2 (10.45-12:15pm)	Session-2.3 (01.00-02:30pm)	Session-2.4 (02.45-
1	Dr.	Amit Kamra	Assistant Professor	19	4	ah	4
2	Er.	Birpal Kaur	Assistant Professor	6	6	£ .	As .
3	Er.	Dinesh Anand	Assistant Professor	70	77	A	
4	Er.	Divya Sharma	Research Scholar	Drug snarma	- O juje Sharma	Oingo Shoem	Orya sharme
5	Er.	Gitanjali	Research Scholar	- Julyala	- isterfali	Hajot.	Heijah
6	Er.	Gurjit Kaur	Assistant Professor	Charz	aux	Gran	Kar
7	Er.	Gurjot Singh	Assistant Professor	asile.	(hall	161	160
8	Er.	Hanit Kaur	Assistant Professor	10h	R	an	AX.
9	Er.	Harjot Kaur Gill	Assistant Professor	and	Total	act	ACC
10	Er.	Harpeet Kaur	Assistant Professor	Manphet Key	Howhite he	Harbirt K.	Horbit les
11	Er.	Harsimran Kaur	Research Scholar	Horsonian Lave	Haysonvan few	Houseman fau	Housimour fars
12	Er.	Jagdeep Singh	Assistant Professor	18	18	1	W
13	Er.	Jasmine Kaur	Assistant Professor	flare	a East	FIE	00
14	Dr.	K.S. Mann	Professor	W.			#
15	Dr.	Kamaljit Kaur	Assistant Professor	10-gg	4-60	V XIS	V 48
16	Er.	Kapil Kumar	Assistant Professor	Variat Lumas	Januay Lings	J. J. Yamar	Karly Luner

w

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing Date: 01st January 2019 (Tuesday)

S.No.	1	Name of the Participant	Designation		Day 2 (S	ignatures)	
				Session-2.1 (09.00-10:30am)	Session-2.2 (10.45-12:15pm)	Session-2.3 (01.00-02:30pm)	Session-2.4 (02.45- 04:15pm)
17	Mr.	Karanbir Singh	CEO	Kowles & 2	Law Sin	+ Lareltone	Karalegue
18	Dr.	Kiran Jyoti	Assistant Professor	2	10/	18	9
19	Er.	Mandeep Kaur	Assistant Professor	MK	MK	MK	MK
20	Er.	Mandeep Kaur	Research Scholar	Mary.	War.	Paper	ndo-
21	Er.	Navpreet Kaur	Research Scholar	Chair.	Pros	Popage	Mes
22	Er.	Nidhi Sharma	Assistant Professor	Listerent	Leabhard !	e Hollichers	Quality 1
23	Dr.	Pankaj Bhambri	Assistant Professor	- Rev-	The	tues	- Fory
24	Ms.	Parminder Kaur	Assistant Professor	00	-0	0	0
25	Er.	Prabhjot Kaur	Research Scholar	July of	a Ra	R	8
26	Er.	Prabhjot Kaur	Assistant Professor	Phabhotus	habbydh	Dashyol	Inappula
27	Mr.	Puneet Singh	Director	June et Stu	Yuncet 814	1 formet gy	Janes Fill
28	Er.	Rajni Puri	Assistant Professor	A	12	1 D	B
29	Er.	Rupinder Kaur	Assistant Professon	fix	Atk.	dix	dek
30	Er.	Sachin Bagga	Assistant Professor	1		10 Ju	200
31	Er.	Sandeep Kumar Singla	Assistant Professor	1 18	1	1/8	1 de la companya della companya della companya de la companya della companya dell
32	Er.	Sartinderpal Singh	AP (CP)/ CP, Computer Centre		1		
33	Er.	Shifa Grover	Research Scholar	Shila Grown	Shifa Grows	Ship Grany	Shita Gran

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing Date: 01st January 2019 (Tuesday)

S.No.		Name of the Participant	Designation	Day 2 (Signatures)					
				Session-2.1 (09.00-10:30am)	Session-2.2 (10.45-12:15pm)	Session-2.3 (01.00-02:30pm)	Session-2.4 (02.45- 04:15pm)		
. 34	Er.	Shivani Arora Abrol	Assistant Professor	A	8	8			
35	Er.	Sidharth Jain	Assistant Professor	22			45		
36	Dr.	Sumeet Kaur Sehra	Assistant Professor	*	R	25	1		
37	Ms.	Sunanda Lal	Assistant Professor	State	Stall	1(2)	10.00		
38	Er.	Swaranjit Singh		Swaria	Swarn	dumut-	Swarns		
39	Ms.	Taranpreet Kaur	Assistant Professor	* /	Mariant	Morran	Marie		
40	Dr.	Vikas Singla	Assistant Professor		and -	a D	(2)		
41	Er.	Yadvir Kaur	Assistant Professor		Madr	Yadir	7.		

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing Date: 02nd January 2019 (Wednesday)

S.No.		Name of the Participant	Designation		Day 3 (Si	gnatures)	
011.00				Session-3.1 (09.00-10:30am)	Session-3.2 (10.45-12:15pm)	Session-3.3 (01.00-02:30pm)	Session-3.4 (02.45 04:15pm)
1	Dr.	Amit Kamra	Assistant Professor	A	pr.	AS	A
2	Er.	Birpal Kaur	Assistant Professor			-	4
3	Er.	Dinesh Anand	Assistant Professor	a			
4	Er.	Divya Sharma	Research Scholar	Manny	Home	Axime	Manne
5	Er.	Gitanjali	Research Scholar	Thyal -	Control -	Carpet.	-til-ol
6	Er.	Gurjit Kaur	Assistant Professor	lyons	epus	gm.	gher.
7	Er.	Gurjot Singh	Assistant Professor	asm	Stat	gogul	Sher
8	Er.	Hanit Kaur	Assistant Professor	100	Cla	Ido	A COL
9	Er.	Harjot Kaur Gill	Assistant Professor	(A)	(H)of	Her	(he)
10	Er.	Harpreet Kaur	Assistant Professor	He	H2-	42	His
11	Er.	Harsimran Kaur	Research Scholar	Wear	Flor	(Hkas	Plan
12	Er.	Jagdeep Singh	Assistant Professor	· For	H	Jal	J.
13	Er.	Jasmine Kaur	Assistant Professor	- Sam	gran	Kara	Skape
14	Dr.		Professor			W.	
15	Dr.	Kamaljit Kaur	Assistant Professor		KFG8	KG8	Kgy
16	Er.	Kapil Kumar	Assistant Professor	Karil Lunar	Karil Kumar	Laried Lumer	Kapel Kumus

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing Date: 02nd January 2019 (Wednesday)

S.No.		Name of the Participant		Our a Trainan		signatures)	
				Session-3.1 (09.00-10:30am)	Session-3.2 (10.45-12:15pm)	Session-3.3 (01.00-02:30pm)	Session-3.4 (02.45- 04:15pm)
17	Mr.	Karanbir Singh	CEO	Konewigen	Karelter	Karabee	- Koreky
18	Dr.	Kiran Jyoti	Assistant Professor	N/	18/	10/	Q o
19	Er.	Mandeep Kaur	Assistant Professor	MK	MK	MK	MK
20	Er.	Mandeep Kaur	Research Scholar	W	N	- CD	No.
21	Er.	Navpreet Kaur	Research Scholar	Okam	Pkaur	Pham	Chaus
22	Er.	Nidhi Sharma	Assistant Professor	Delillahas	Vadualhas	Yusahare	Kadushane
23	Dr.	Pankaj Bhambri	Assistant Professor	Tank	Lakery	Targen	Marilla Maria
24	Ms.	Parminder Kaur	Assistant Professor		0	0	0
25	Er.	Prabhjot Kaur	Research Scholar	San	llow	Acri,	Pkur
26	Er.	Prabhjot Kaur	Assistant Professor	Trabbala	Maldystu	Tradyet	Osephale
27	Mr.	Puneet Singh	Director	Puncet di	Kunter of	Puncetj.	Puncet & M.
28	Er.	Rajni Puri	Assistant Professor	8	Ø	D.	2
29	Er.	Rupinder Kaur	Assistant Professor	17	12	11-1	13/
30	Er.	Sachin Bagga	Assistant Professor	Ju	41	0	TATE
31	Er.	~	Assistant Professor	40	J.	18	94/
32	Er.		AP (CP)/ CP, Computer Centre	4	&	10/2	184
33	Er.	Shifa Grover		Shifer Grown	Stufe beau	Physa buom	Shelo brown.

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing Date: 02nd January 2019 (Wednesday)

S.No.		Name of the Participant	Designation		Day 3 (S	ignatures)	
				Session-3.1 (09.00-10:30am)	Session-3.2 (10.45-12:15pm)	Session-3.3 (01.00-02:30pm)	Session-3.4 (02.45- 04:15pm)
34	Er.	Shivani Arora Abrol	Assistant Professor	00	8	8_	8
35	Er.	Sidharth Jain	Assistant Professor	2	9	4	( 2 )·
36	Dr.	Sumeet Kaur Sehra	Assistant Professor	5	4	5	8
37	Ms.	Sunanda Lal	Assistant Professor	flell	flell	flold	Sleet
38	Er.	Swaranjit Singh	Research Scholar	Suarre	Swanz	Suaras	Surane
39	Ms.	Taranpreet Kaur	Assistant Professor	of sent	Morena	Moonet	Mapeter
40	Dr.	Vikas Singla	Assistant Professor	952	8	82	82
41	Er.	Yadvir Kaur	Assistant Professor	*dd:	Yode	Yodan	Yoult

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing Date: 03rd January 2019 (Thursday)

S.No.		Name of the Participant	Designation		Day 4 (Signatures)			
				Session-4.1 (09.00-10:30am)	Session-4.2 (10.45-12:15pm)	Session-4.3 (01.00-02:30pm)	Session-4.4 (02.45-04:15pm)	
1	Dr.	Amit Kamra	Assistant Professor	A	A	A	A	
2	Er.	Birpal Kaur	Assistant Professor	8	1	0		
3	Er.	Dinesh Anand	Assistant Professor	at D	3		A	
4	Er.	Divya Sharma	Research Scholar	They & morma	Diny grass	Dingham	Derdans	
5	Er.	Gitanjali	Research Scholar	The state of the s	Introdu -	tally de	- CHILIN	
6	Er.	Gurjit Kaur	Assistant Professor	Grans	grans	come	Mario	
7	Er.	Gurjot Singh	Assistant Professor	GSIL	God	4 Sul	68M	
8	Er.	Hanit Kaur	Assistant Professor	Illa	Os.			
9	Er.	Harjot Kaur Gill	Assistant Professor	AND	THE	(409)	Det	
10	Er.	Harpreet Kaur	Assistant Professor	Hh	AL	H2		
11	Er.	Harsimran Kaur	Research Scholar	Akart	Hause	Alaus	Hau	
12	Er.	Jagdeep Singh	Assistant Professor	*	1	2	J.	
13	Er.	Jasmine Kaur	Assistant Professor	Okam )	Skaper	okan	Maur	
14	Dr.	K.S. Mann	Professor	A	1			
15	Dr.	Kamaljit Kaur	Assistant Professor		148	Kgr	148	
16	Er.	Kapil Kumar	Assistant Professor	Wash Kuman	1 - 1 Kuman	1 - Kumar	1 - 1 Kuman	

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing Date: 03rd January 2019 (Thursday)

S.No.		Name of the Participant	Designation		Day 4 (5	Signatures)	
		HERE DE SITE		Session-4.1	Session-4.2	Session-4.3	Session-4.4
18	Dr.	Kiran Jyoti	Assistant Professor	12/	Q	0	-10
19	Er.	Mandeep Kaur	Assistant Professor	MK	MK	MK	MIK
20	Er.	Mandeep Kaur	Research Scholar	WK.	ML.	Mk.	Mt.
21	Er.	Navpreet Kaur	Research Scholar	Okaus	okans	Okanz	Mans
22	Er.	Nidhi Sharma	Assistant Professor	Nidehams	N) shighouna	Hidelycamie	Haligram.
23	Dr.	Pankaj Bhambri	Assistant Professor	- farfrey	Lague	fargus	- farguer
24	Ms.	Parminder Kaur	Assistant Professor	a D	A.Q.	<b>Q</b> A	Oby /
25	Er.	Prabhjot Kaur	Research Scholar		\$/		1
26	Er.	Prabhjot Kaur	Assistant Professor	Prabhystanz	Preblyotkaur	Prablystyans	grathysteaus
27	Mr.	Puneet Singh	Director	Parent Si	funcet gu	Puncet Si.	hunest Sys
28	Er.	Rajni Puri	Assistant Professor	0 &	28	1	18
29	Er.	Rupinder Kaur	Assistant Professor	der	afr	Lux	detk
30	Er.	Sachin Bagga	Assistant Professor	20 Dr	0 52	e at	July John
31	Er.	Sandeep Kumar Singla	Assistant Professor	1878	*		8
32	Er.	Sartinderpal Singh	AP (CP)/ CP, Computer Centre	1	1	19	1-3
33	Er.	Shifa Grover	Research Scholar	Shifa Grown	Anto Glore	Inla Grown	Shifa Gre

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing Date: 03rd January 2019 (Thursday)

S.No.		Name of the Participant	Designation	Day 4 (Signatures)				
				Session-4.1	Session-4.2	Session-4.3	Session-4.4	
35	Er.	Sidharth Jain	Assistant Professor	\$	41		. 92	
36	Dr.	Sumeet Kaur Sehra	Assistant Professor	4	R	8	a	
37	Ms.	Sunanda Lal	Assistant Professor	Stell	Slall	School	glatt	
38	Er.	Swaranjit Singh	Research Scholar	dwares	Surve	Queone	Sum	
39	Ms.	Taranpreet Kaur	Assistant Professor	Moseur	Morrison	Morrison	Morante	
40	Dr.	Vikas Singla	Assistant Professor	962	as-	952	AL	
41	Er.	Yadvir Kaur	Assistant Professor	You	4 odule	4 od-	Yell	
012	Me.	Shi vani A Abed	A.P	3	2	9	8	

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing
Date: 04th January 2019 (Friday)

S.No.		Name of the Participant	Designation		Day 5 (S	ignatures)	
				Session-5.1 (09.00-10:30am)	Session-5.2 (10.45-12:15pm)	Session-5.3 (01.00-02:30pm)	Session-5.4 (02.45-04:15pm)
1	Dr.	Amit Kamra	Assistant Professor	A	A	A	A
2	Er.	Birpal Kaur	Assistant Professor	1	1	\$	\$
3	Er.	Dinesh Anand	Assistant Professor	2		A-	
4	Er.	Divya Sharma	Research Scholar	Dingathama	Diryallane	Sityastrono	Stryaston
5	Er.	Gitanjali	Research Scholar	- Thurds -	They al,	The state of the s	- STI AND
6	Er.	Gurjit Kaur	Assistant Professor	gkam	gkavy	glan	gkay
7	Er.	Gurjot Singh	Assistant Professor	asal	61	atr	and a
8	Er.	Hanit Kaur	Assistant Professor	NX.		(Va)	
9	Er.	Harjot Kaur Gill	Assistant Professor	* AND	T ADS	Had	(A) of
10	Er.	Harpreet Kaur	Assistant Professor	you	He	14	Ite
11	Er.	Harsimran Kaur	Research Scholar	Dove	Hour	Plane	Haus
12	Er.	Jagdeep Singh	Assistant Professor	0 1	2	K	26
13	Er.	Jasmine Kaur	Assistant Professor	Jean	Jkain	Fram	fkam
14	Dr.	K.S. Mann	Professor	W-			
15	Dr.	Kamaljit Kaur	Assistant Professor		1458	KGX	KGY
16	Er.	Kapil Kumar	Assistant Professor	11 - 1 Vumar	1 :   Xumar	. : \ Kumer	1 in Kumar

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing Date: 04th January 2019 (Friday)

S.No.		Name of the Participant	Designation		Day 5 (S	Signatures)	
				Session-5.1	Session-5.2	Session-5.3	Session-5.4
18	Dr.	Kiran Jyoti	Assistant Professor	(8)	Q	4	. 0_
19	Er.	Mandeep Kaur	Assistant Professor	MK.	MK	MY	MK A
20	Er.	Mandeep Kaur	Research Scholar	MA .	A.	MA	40
21	Er.	Navpreet Kaur	Research Scholar	Okany	Clary	Phair	Planty
22	Er.	Nidhi Sharma	Assistant Professor	Nidhgranna	Maligharmer	Wheighaum	Meligrama
23	Dr.	Pankaj Bhambri	Assistant Professor	Lacy	-FRIN	A STAND	- Som
24	Ms.	Parminder Kaur	Assistant Professor	0	4		(II)
25	Er.	Prabhjot Kaur	Research Scholar	te	2		X.
26	Er.	Prabhjot Kaur	Assistant Professor	Practigot Raun	Problyst kan	Prateyotkaur	Praseystkam
27	Mr.	Puneet Singh	Director	Punset 8	Piercet Su	Junet 8	funests
28	Er.	Rajni Puri	Assistant Professor		R	- R	R
29	Er.	Rupinder Kaur	Assistant Professor	dex	h	1	AIN
30	Er.	Sachin Bagga	Assistant Professor	in the	0,77	Sign	Ju Do
31	Er.	Sandeep Kumar Singla	Assistant Professor	1000	19	No.	
32	Er.	Sartinderpal Singh	AP (CP)/ CP, Computer Centre	1	13	13	1
33	Er.	Shifa Grover	Research Scholar	Rife Guorn	Chyla Grown	Strife Treown	Shifa treown

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing Date: 04th January 2019 (Friday)

S.No.		Name of the Participant	Designation	Day 5 (Signatures)				
				Session-5.1	Session-5.2	Session-5.3	Session-5.4	
35	Er.	Sidharth Jain	Assistant Professor	92	2	9	. 80_	
36	Dr.	Sumeet Kaur Sehra	Assistant Professor	Bo	8	8	K	
37	Ms.	Sunanda Lal	Assistant Professor	Stell	العلا	Stell	Stell	
38	Er.	Swaranjit Singh	Research Scholar	Limon	8wannie	Sugnar	Summe	
39	Ms.	Taranpreet Kaur	Assistant Professor	Margaret	Morena	Maria	Moren	
40	Dr.	Vikas Singla	Assistant Professor	(A)	(4)	2007	85	
41	Er.	Yadvir Kaur	Assistant Professor	Yadvis	Yadr	Hode	40-	

## **Cosolidated Attendance Sheet (QIP-STC)**

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing 31st December 2018 (Monday) - 04th January 2019 (Friday)

Venue: Consultancy Seminar Hall, Guru Nanak Dev Engineering College Ludhiana

S.No.		Name of the Participant	Designation					
				31.12.2018	1.1.2019	2.1.2019	3.1.2019	4.1.2019
1	Dr.	Amit Kamra	Assistant Professor	A	A	A	A.	A
2	Er.	Birpal Kaur	Assistant Professor	8	\$	8_	-	-
3	Er.	Dinesh Anand	Assistant Professor	70		all	A.	
4	Er.	Divya Sharma	Research Scholar	Hirgashana	Dingatrano	Drugashana	Dirigestran	Miye Than
5	Er.	Gitanjali	Research Scholar	- Internal	- Jugali	- Inde	Silver!	Cally
6	Er.	Gurjit Kaur	Assistant Professor	granz	fykaurs	ejkaur	efaur	Marz
21	Er.	Gurjot Singh	Assistant Professor	and	Soul	Lot	Sold	for -
8	Er.	Hanit Kaur	Assistant Professor					
(9)	Er.	Harjot Kaur Gill	Assistant Professor	Ale	AND	Med	Al	They
-10	Er.	Harpreet Kaur	Assistant Professor	An	Th	Hh	FIK	Me
11	Er.	Harsimran Kaur	Research Scholar	Alan	Plans	Plans	Herry	frais
12	Er.	Jagdeep Singh	Assistant Professor	X	The	H	H	1
13	Er.	Jasmine Kaur	Assistant Professor	- Jkaun	TRacy	Thank	Jkaun	Traun
14	Dr.	K.S. Mann	Professor	Of Contract of the Contract of	W.	V	W.	14
15	Dr.	Kamaljit Kaur	Assistant Professor	x gol	KGT	KGT	X-G8	KG8
16	Er.	Kapil Kumar	Assistant Professor	Vail Humar	Varial Kimos	Kariel Kumar	shand on	Varid ofm

Haranbir &

## **Cosolidated Attendance Sheet (QIP-STC)**

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing 31st December 2018 (Monday) - 04th January 2019 (Friday)

S.No.		Name of the Participant	Designation					
116	1			31.12.2018	1.1.2019	2.1.2019	3.1.2019	4.1.2019
18	Dr.	Kiran Jyoti	Assistant Professor	· Q/	Q/	0/	Q.	9
19	Er.	Mandeep Kaur	Assistant Professor	MK	MK	MK	MK	MK
20	Er.	Mandeep Kaur	Research Scholar	100	A	R	R	182
21	Er.	Navpreet Kaur	Research Scholar	Planz	Chaus	Chain	Planz	Okam
22	Er.	Nidhi Sharma	Assistant Professor	Wildhigranna	Nedhisham	Mussiam	Mylligrams	Margranes
23	Dr.	— Pankaj Bhambri	Assistant Professor	fair.	for .	feet.	Fre -	form.
24	Ms.	Parminder Kaur	Assistant Professor		0		<b>P</b>	Q
25	Er.	Prabhjot Kaur	Research Scholar	B	6	0	8	Ber
26	Er.	Prabhjot Kaur	Assistant Professor	Prabligat Kall	PrablyotSlaur		Problyst Kaun	
27	Mr.	Puneet Singh	Director	lunest &	funest &	Punea S;	(west &	Larest 18th
28	Er.	Rajni Puri	Assistant Professor	, Q	No.	R	A	B
29	Er.	Rupinder Kaur	Assistant Professor	det	Atr	AIN	Atk	OHITE
30	Er.	Sachin Bagga	Assistant Professor	1500	Ing	19	D'	20
31	Er.	Sandeep Kumar Singla	Assistant Professor	100	0/12		Mr.	1
32	Er.	Sartinderpal Singh	AP (CP)/ CP, Computer Centre	1	1	54	5	
33	Er.	Shifa Grover	Research Scholar	Rila Grown	Shita brown	Stife Guow.	Infabren	Rifa brown

## **Cosolidated Attendance Sheet (QIP-STC)**

Name of the Course: AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing 31st December 2018 (Monday) - 04th January 2019 (Friday)

Venue: Consultancy Seminar Hall, Guru Nanak Dev Engineering College Ludhiana

S.No.		Name of the Participant	Designation					
				31.12,2018	1.1.2019	2,1.2019	3.1,2019	4,1,2019
35	Er.	Sidharth Jain	Assistant Professor	L	2	2	2	D
36	Dr.	Sumeet Kaur Sehra	Assistant Professor	6	5	8	8	8
37	Ms.	Sunanda Lal	Assistant Professor	Shell	Slell	My	Shall	Sled
38	Er.	Swaranjit Singh	Research Scholar	Swammertsman	Surproruit Singu	ngmittilmrawl	Swariand & Sman	Suson Hiron
39	Ms.	Taranpreet Kaur	Assistant Professor	Morrison	Marini	Maraut	Mariant	- Marsur
40	Dr.	Vikas Singla	Assistant Professor	80	- 72	- 82	8	DY2
41	Er.	Yadvir Kaur	Assistant Professor	Y advis	Yadvi	Yadui	Yoda	400
42	nus	. Shinani A. Absol	A.P	8	8		8 _	8

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S. No.	Dr./ Er./ Mr./ Ms./ Mrs.	Participant Name	Designation	Affiliation	Signature with Date
1	Er.	Birpal Kaur	Assistant Professor	GNA University, Phagwara	
2	Er.	Divya Sharma	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	Dilya Sugar
3	Er.	Gitanjali	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	
4	Er.	Gurjit Kaur	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	lyhous
5	Er.	Gurjot Singh	Assistant Professor	Malwa College, Samrala	asory tiling
6	Er.	Harsimran Kaur	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	War 9/10/1 2019
7	Er.	Jasmine Kaur	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	Jargentes
8	Er.	Kapil Kumar	Assistant Professor	Lingaya's Vidyapeeth, Faridabad	Karil Kuman 17/17
9	Mr.	Karanbir Singh	CEO	Up2Mark Technologies Pvt. Ltd.	Jenani
10	Er.	Mandeep Kaur	Assistant Professor	Khalsa College for Women, Ludhiana	Hamy 1/19
11	Er.	Mandeep Kaur	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	Man (11/19.
12	Er.	Navpreet Kaur	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	Raupruttous 4/01/
13	Er.	Nidhi Sharma	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	Mide Shara
14	Ms.	Parminder Kaur	Assistant Professor	Khalsa College for Women, Ludhiana	Dan 14/1/19

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S. No.	Dr./ Er./ Mr./ Ms./ Mrs.	Participant Name	Designation	Affiliation	Signature with Date
15	Er.	Prabhjot Kaur	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	Prastype kam 4 To
16	Er.	Prabhjot Kaur	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	Parshot Kale
17	Mr.	Puneet Singh	Director	Up2Mark Technologies Pvt. Ltd.	Queet &
18	Er.	Rajni Puri	Assistant Professor	Gujranwala Guru Nanak Institute of Management & Technology, Ludhiana	1 Specifiles
19	Er.	Sartinderpal Singh	AP (CP)/ CP, Computer Centre	Guru Nanak Dev Engineering College, Ludhiana	Got 4/1/19
20	Er.	Shifa Grover	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	Stofa Grow 4/1/19
21	Er.	Shivani Arora Abrol	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	2 8
22	Dr.	Sumeet Kaur Sehra	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	841119
23	Ms.	Sunanda Lal	Assistant Professor	Gujranwala Guru Nanak Institute of Management & Technology, Ludhiana	1 4/10/2019
24	Er.	Swaranjit Singh	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	Sugna 112019
25	Ms.	Taranpreet Kaur	Assistant Professor	Mata Gujri College, Fatehgarh Sahib	Ymauri
26	Dr.	Vikas Singla	Assistant Professor	Malout Institute of Management & Information Technology, Malout	B-4/2/19/19

S. No.	Mr./Ms./  Participant Name   Designation   Allius		Affiliation	Remarks for the Photographer	
1	Dr.	Amit Kamra	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5156
2	Er.	Birpal Kaur	Assistant Professor	GNA University, Phagwara	5159
3	Er.	Dinesh Anand	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5173
4	Er.	Divya Sharma	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	5278
5	Er.	Gitanjali	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	5281
6	Er.	Gurjit Kaur	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5267
7	Er.	Gurjot Singh	Assistant Professor	Malwa College, Samrala	5157
8	Er.	Hanit Karwal	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5168.
9	Er.	Harjot Kaur Gill	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5176
10	Er.	Harpeet Kaur	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5175
11	Er.	Harsimran Kaur	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	5164
12	Er.	Jagdeep Singh	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5153
13	Er.	Jasmine Kaur	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5265
14	Dr.	K.S. Mann	Professor	Guru Nanak Dev Engineering College, Ludhiana	5273

S. No.	Dr./ Er./ Mr./ Ms./ Mrs.	Participant Name	Designation	Affiliation	Remarks for the Photographer
15	Dr.	Kamaljit Kaur	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5165
16	Er.	Kanwalpreet Singh Sidhu	Assistant Professor	Bhutta College of Engineering and Technology, Ludhiana	a
17	Er.	Kapil Kumar	Assistant Professor	Lingaya's Vidyapeeth, Faridabad	5158
18	Er.	Karamjit Singh Gill	Assistant Professor	Bhutta College of Engineering and Technology, Ludhiana	a
19	Mr.	Karanbir Singh	CEO	Up2Mark Technologies Pvt. Ltd.	5263
20	Dr.	Kiran Jyoti	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5274
21	Er.	Mandeep Kaur	Assistant Professor	Khalsa College for Women, Ludhiana	5178
22	Er.	Mandeep Kaur	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	5277
23	Er.	Navpreet Kaur	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	5279
24	Er.	Nidhi Sharma	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5268.
25	Er.	Nitish Sharma	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	4
26		Pankaj Bhambri	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5160
27	Ms.	Parminder Kaur	Assistant Professor	Khalsa College for Women, Ludhiana	5161
28		Prabhjot Kaur	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	5276

		Photogra	iph on Dated 31.12.2016	
Dr./ Er./ Mr./ Ms./ Mrs.	Participant Name	Designation	Affiliation	Remarks for the Photographer
A STATE OF THE STA	Prabhjot Kaur	Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5269
		Director	Up2Mark Technologies Pvt. Ltd.	5262
		Assistant Professor	Gujranwala Guru Nanak Institute of Management & Technology, Ludhiana	5172
		Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	X
		Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5266
		Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5154
			Guru Nanak Dev Engineering College, Ludhiana	X
		Assistant Professor	Guru Nanak Dev Engineering College, Ludhiana	5285
			Callege Ludbigge	5174
			Guru Nanak Dev Engineering College, Ludhiana	5283
			Guru Nanak Dev Engineering College, Ludhiana	5288
				5169
				5286
	the state of the s	Mr./ Ms./ Mrs.  Er. Prabhjot Kaur  Mr. Puneet Singh  Er. Rajni Puri  Er. Ravinder Kaur  Er. Rupinder Kaur  Er. Sachin Bagga  Er. Samreet Kaur Gosal  Er. Sandeep Kumar Singla  Er. Sartinderpal Singh  Er. Shifa Grover  Er. Shivani Arora Abrol  Er. Sidharth Jain  Dr. Sumeet Kaur Sehra	Dr./ Er./ Mr./ Ms./ Mrs.  Er. Prabhjot Kaur Assistant Professor  Mr. Puneet Singh Director  Er. Rajni Puri Assistant Professor  Er. Ravinder Kaur Assistant Professor  Er. Rupinder Kaur Assistant Professor  Er. Sachin Bagga Assistant Professor  Er. Samreet Kaur Gosal Assistant Professor  Er. Sandeep Kumar Singla Assistant Professor  Er. Sartinderpal Singh AP (CP)/ CP, Computer Centred  Er. Shivani Arora Abrol Assistant Professor  Er. Sidharth Jain Assistant Professor  Dr. Sumeet Kaur Sehra Assistant Professor	Mr./ Ms./ Mr. Prabhjot Kaur Assistant Professor Guru Nanak Dev Engineering College, Ludhiana Mr. Puneet Singh Director Up2Mark Technologies Pvt. Ltd.  Er. Rajni Puri Assistant Professor Guru Nanak Institute of Management & Technology, Ludhiana Er. Ravinder Kaur Assistant Professor Guru Nanak Dev Engineering College, Ludhiana Er. Rupinder Kaur Assistant Professor Guru Nanak Dev Engineering College, Ludhiana Er. Sachin Bagga Assistant Professor Guru Nanak Dev Engineering College, Ludhiana Er. Samreet Kaur Gosal Assistant Professor Guru Nanak Dev Engineering College, Ludhiana Er. Sandeep Kumar Singla Assistant Professor Guru Nanak Dev Engineering College, Ludhiana Er. Sandeep Kumar Singla Assistant Professor Guru Nanak Dev Engineering College, Ludhiana Er. Santinderpal Singh AP (CP)/ CP, Computer Centre Guru Nanak Dev Engineering College, Ludhiana Er. Shifa Grover Research Scholar Guru Nanak Dev Engineering College, Ludhiana Er. Shivani Arora Abrol Assistant Professor Guru Nanak Dev Engineering College, Ludhiana Er. Sidharth Jain Assistant Professor Guru Nanak Dev Engineering College, Ludhiana Er. Sidharth Jain Assistant Professor Guru Nanak Dev Engineering College, Ludhiana Er. Sumeet Kaur Sehra Assistant Professor Guru Nanak Dev Engineering College, Ludhiana

Dr./ Er./ Mr./ Ms./	Participant Name	Designation	Affiliation	Remarks for the Photographer
	Sunil Aggarwal	Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	X1
		Research Scholar	Guru Nanak Dev Engineering College, Ludhiana	5163
		Assistant Professor	Mata Gujri College, Fatehgarh Sahib	5162
35570925			Bhutta College of Engineering and Technology, Ludhiana	8
			Malout Institute of Management & Information Technology, Malout	5264
				5177
		Er. Sunil Aggarwal  Er. Swaranjit Singh  Ms. Taranpreet Kaur  Dr. V.J. Rai  Dr. Vikas Singla	Mrs.  Er. Sunil Aggarwal Research Scholar  Er. Swaranjit Singh Research Scholar  Ms. Taranpreet Kaur Assistant Professor  Dr. V.J. Rai Principal  Dr. Vikas Singla Assistant Professor	Mrs.  Er. Sunil Aggarwal Research Scholar Guru Nanak Dev Engineering College, Ludhiana  Er. Swaranjit Singh Research Scholar Guru Nanak Dev Engineering College, Ludhiana  Ms. Taranpreet Kaur Assistant Professor Mata Gujri College, Fatehgarh Sahib  Dr. V.J. Rai Principal Bhutta College of Engineering and Technology, Ludhiana  Dr. Vikas Singla Assistant Professor Malout Institute of Management & Information Technology, Malout  Assistant Professor Guru Nanak Dev Engineering College, Ludhiana

## Event Report of Quality Improvement Programme (QIP) Short Term Course (STC) on "AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing" during Dec. 31st, 2018 to Jan. 04th, 2019

Information Technology Department of Guru Nanak Dev Engineering College, Ludhiana concluded the weeklong series of lectures and hands-on practice sessions on Quality Improvement Programme (QIP) Short Term Course (STC) on title "AI, Big Data and HPC Aligned Applications - A Modern Approach of Computing". This STC was sponsored by QIP Centre of the Institute. The valediction programme of this course was organized in the consultancy seminar hall of the campus on Friday. This programme was organized with the objective of sharing recent developments in the areas of Artificial Intelligence, Big Data and High Performance Computing with practical demonstration. 17 resource persons of renowned institutions of the region had shared their views and further research areas among the participants.

Dr. Sarabjot Singh Anand from Sabudh Foundation, New Delhi was invited as chief guest for the valediction of this programme. In his speech, chief guest emphasised that awareness of technology trends in AI and HPC is the need of the hour, but at same time security of information transferred is important area of concern. He further elaborated that role of hidden variables in machine learning.

In the whole five day programme the academicians, software professional and researchers were invited to deliver the expert talks during the course. During this programme, **Dr. Shashi** Shekhar Jha from IIT Ropar elaborated the case study of Demands and Supplies Prediction for Taxis in Singapore. Dr. Sukhwinder Singh, Director, Computer Centre at Panjab University, Chandigarh pointed out various innovative ideas implemented at the industry and government level for the concern of Artificial Intelligence and High Performance Computing. Dr. Kuldeep Kumar from Dr. B.R.Ambedkar National Institute of Technology, Jalandhar discussed the topics of Practical Approach to Research Methodologies and Industry-Academic Research Trends in Computing. He demonstrated the contents by sharing live examples.

Er. Navjot Singh from AlertEnterprise Chandigarh shared his views on Disruptive Applications of AI in Various Industries with Use Cases and Scientific Solutions. He elaborated the Alignment of Academic and Research in Modern Day AI based Disruption and Opportunity for Application Oriented Research Activities. Dr. Pankaj Bhambri from GNDEC Ludhiana presented the role and need of High Performance Computing with evolving research trends in bioinformatics. Mr. Vipin Gupta from U.Net Solution organized the hands on session on Implementation of Docker Cluster and Software Defined Networking. Dr. Nirnal Kaur from UIET Panjab University Chandigarh and Er. Amit Deoger from NITTTR Chandigarh delivered their expert talks on Need cum Techniques for Energy Aware Scheduling and Implementation of Load Balancer for Big Data Applications, respectively. Er. Sandeep Kumar Singla shared his practical exposure to Big Data Analytics using the R Lab.

Dr. Pankaj Bhambri, the course coordinator of this programme conveyed that this course was organized with the objectives to expose the faculty/ research scholars/ industry based persons in emerging technologies. This programme provided the practical foundation level training to enable the audience for insight into digital disruption and accelerating machine learning on AI through performance libraries and platforms. Dr. Bhambri informed that the course contents for this STC included AI, Bigdata & HPC aligned applications; Exposure to Analysis; Interpretation of Data; AI, Big Data & HPC Research Methods; Exploration of Contemporary Research in Teaching Learning; Real Life Implementation Scenarios; Case Studies and Lab Sessions.

Dr. Kiran Jyoti, HOD of IT Dept. and faculty coordinator of this course presented the summary & feedback report of this short term course at valediction programme. She shared the roles of social media, mobility, analytics and cloud computing. Dr. Sehijpal Singh, Principal of GNDEC mentioned the benefits as well as wastage of resources due to updation in technology every day. He discussed the significance of these types of courses for faculties as well as researchers and congratulated the course coordinators for organizing this STC. Participation Certificates were issued to 41 participants, which came from different regions of the country to attend this STC.

PANKAT BHAMBRI CONTSE COORDINGTON

#### ABOUT THE COURSE

The requirement for efficient and lowprofile antennas has propelled research work in the development of antenna structures with performances considerably enhanced over traditional antenna structures and methodologies. This course is devoted the fundamental theory, recent developments and research outcomes addressing the related theoretical and practical aspects in the usage of advanced tools and techniques for the design of antennas.

Primary focus of this course is to introduce design challenges of several antennas and their possible solutions which should be further investigated for the future generation applications. It will also enhance the research competence of faculty in the areas of antennas by providing exposure to practical problems and solutions through case studies. In particular, the course will start with the introduction to the basics of antenna theory and then covering all the major details of latest trends in antenna design along with hands on session to give insights.

### COURSE CONTENTS

- Antenna Fundamentals
- Antenna Parameters and Measurements
- Dipole Antenna Analysis and Applications
- Microstrip Antennas
- Antenna Arrays
- Fractal Antennas
- Metamaterial Antennas
- Design of Antennas using Conventional and Soft Computing approaches
- Antenna Fabrication and Measurement
- Antenna Design: Case Studies
- Session on Art of Living

#### IMPORTANT DATES

Submission of registration form: 23.11.2018

> Acceptance notification: 27.11.2018

#### CONTACT DETAILS

Dr. Balwinder Singh Dhaliwal Assistant Professor Department of Electronics and Communication Engineering Guru Nanak Dev Engineering College Ludhiana, Punjab - 141006

E-mail: ece.antennacourse@gmail.com

Phone: 0161-5064766 (O) 98148-34209 (M)

#### PATRON

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

#### CO-PATRON

Dr. Sandeep Singh Gill, HOD (ECE)

#### COORDINATOR

Dr. Balwinder Singh Dhaliwal Assistant Professor, Deptt. of ECE AICTE-ISTE Induction/Refresher Course

On

Advances in Antenna Theory and Techniques

03.12.2018 to 08.12.2018



Coordinator Dr. Balwinder Singh Dhaliwal

Organized by Department of Electronics and Communication Engineering

Guru Nanak Dev Engineering College Ludhiana

Gill Road, Gill Park, Ludhiana, Punjab - 141006 E-mail: ece.antennacourse@gmail.com Phone: 0161-5064766 (O) 98148-34209 (M)

#### ABOUT THE INSTITUTE

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. This college has the privilege of starting Ph.D degree under Quality Improvement Programme (QIP) by AICTE, New Delhi Apart from offering various B.Tech courses, the institute also imparts thirteen postgraduate courses both on regular and part time basis. An excellent platform is provided to the researchers leading to Ph.D degree program.

### ABOUT THE DEPARTMENT

The Department of Electronics and Communication Engineering, established in 1981, is one of the most dynamic departments of Guru Nanak Dev Engineering College. The department is currently running UG and PG courses in Electronics and Communication Engineering and has around 15 scholars enrolled for doctorate in areas like Antenna Design, VLSI, Optical communication etc. 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 of the last 20 years and manning pivotal positions in telecom operators in India, South East Asia, Pacific region and Africa. In the last three years, as a part of an academically autonomous system, the department has been taken numerous quality initiative including revamping of syllabi so that it is in tune with the outcome based system as proposed in the Washington Accord.

ECI- Department is continuously maintaining strong international collaboration with outside world in form of joint research initiatives, editorial board memberships of reputed international journals, serving on academic bodies of various universities.

#### 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 ece.antennacourse@gmail.com

Maximum no. confirmation of c first-come first-se given to the pa Membership, Inco not be entertaine reach the coordinat

Faculty members engineering colleg course.

The certification by ISTE jointly conducted at the certificates will participants, who attendance is man

### TRANSPORT, BOARDING & LODGING

Reimbursement of TA to participants shall be as AICTE-ISTE FDP entitlement rules. Accommodation will be provided free of cost in the students hostels or guest house on sharing basis.

AICTF-ISTF Induction/Refresher Course

### Advances in Antenna Theory and Techniques 03.12.2018 to 08.12.2018 Guru Nanak Dev Engineering College

#### Ludhiana

#### Registration Form

of participants is 40 and ligible candidates will be on a	Name (in block letters):
rve basis. Preference shall be articipants having ISTE Life	Gender: Qualification:
omplete application forms will ed. Registration forms should	Designation/Department:
tor by 23.11.2018	Are you an ISTE Member? : YES / NO
ELIGIBILITY	If YES, then Membership No
of recognized degree level	Organization:
	Address:
of this program will be done	
with AICTE. A test shall be end of the program and the	Mobile:
be issued only to those qualify the test. Also 100%	Email:
datory.	Accommodation required: YES / NO

Signature of candidate

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 technical institution)



## ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਇੰਜੀਨੀਅਰਿੰਗ ਕਾਲਜ਼ Guru Nanak Dev Engineering College

An Autonomous College U/S 2(f) and 12(B) of UGC Act 1956

Institute Accredited by NAAC (A Grade) under UGC & TCS AICTE Approved, Punjab Govt. Aided Status, Affiliated to IKG Punjab Tech. University, Jalandhar

ISO: 9001:2008 Certified • UG Programmes accredited by IEI

Ref. No. 16(6/1943

#### CERTIFICATE

It is to certify that Er.Chahat Jain of GNDEC, Ludhiana has conducted hands on/lab session on "Antenna design and Simulation using IE3D basics" on 03-12-2018 in AICTE-ISTE Induction/ Refresher Course on "Advances in Antenna Theory and Techniques" during 03-12-2018 to 08-12-2018.

Regards, Dr. Balwinder Singh Dhaliwal

Coordinator (AICTE/ISTE Induction/Refresher Course)

& Assistant Professor

Department of Electronics and Communication Engineering, Guru Nanak Dev Engineering College, Ludhiana (Punjab), INDIA

Phone :- (O) 0161-5064766, (M) 09814834209



## ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਇੰਜੀਨੀਅਰਿੰਗ ਕਾਲਜ਼ Guru Nanak Dev Engineering College

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ISO: 9001:2008 Certified • UG Programmes accredited by IEI

Ref. No. 606 1976

Dated 07 12 2018

#### **CERTIFICATE**

It is to certify that Mr. Vivek Tiwari of VIS Photo Circuits, Ambala has given demonstration on "Antenna Designing and Fabrication" on 07-12-2018 in AICTE-ISTE Induction/ Refresher Course on "Advances in Antenna Theory and Techniques" during 03-12-2018 to 08-12-2018.

Regards,

Dr. Balwinder Singh Dhaliwal

Coordinator (AICTE/ISTE Induction/Pefresher Course)

& Assistant Professor

Department of Electronics and Communication Engineering,

Guru Nanak Dev Engineering College, Ludhiana (Punjab), INDIA

Phone :- (O) 0161-5064766, (M) 09814834209

#### Report of

#### **AICTE - ISTE Induction/Refresher Course**

on

## Advances in Antenna Theory & Techniques from 03/12/2018 to 08/12/2018

This course started on 03/12/2018 and we have conducted 22 technical sessions for the participants which included 17 theory sessions, 3 lab cum hands on sessions and 2 sessions by industry personals. Theory sessions are conducted by resource persons from reported institutions like IIT Jammu, Thapar Institute of Engineering & Tech. Patiala, Punjabi University Patiala besides experts from our own college. During lab sessions, hands - on practice is undertaken by the participants on the electromagnetic simulator and actual measurements of the fabricated prototypes are demonstrated. One session on the demonstration of fabrication of prototypes is conducted by industry persons. The topics covered in the program include

- Antenna design for 5G communication
- Antenna array failure correction
- Antenna design using soft computing
- Meta materials' applications in antenna design
- Different types of antennas, etc.

We had 22 participants from various states like JK, HP, Haryana, UP, different colleges of Punjab in addition to participants from our college. A session on art of living was also organized for the participants. As per the feedback of participants, they found this course useful due to many reasons like-

- Practical knowledge
- New research directions
- Forum for discussion on their research problems
- Networking etc.

The course was inaugurated by Dr. Manoj Kumar, Principal, DAV Institute of Engg. & Tech. Jalandhar and the certificates to the participants were distributed by Dr. Ajay Sharma, Vice-Chancellor of IKG PTU, Jalandhar during valediction function.

Dr. Balwinder Singh Dhaliwal

Course Coordinator

#### **ABOUT THE COURSE**

Machine learning is an essential approach to analyze and extract useful information from a wide range of big data; it provides the fundamental tools for big data analytics. By developing fast and efficient algorithms and data-driven models for realtime processing of data, machine learning is able to produce accurate results and analysis. In the past decade, machine learning has been applied in Google's self-driving car, image recognition, computer vision, speech recognition and natural language processing, intelligent robotics, smart cars, automation, online search and recommendations, financial trading and risk management, healthcare, and personal and public security. Machine learning is so pervasive today that we probably use it dozens of times a day without knowing it.

This course aims to introduce the participants to Machine Learning and its various applications. In particular, the course will start with the introduction of machine learning followed by algorithms used in machine learning. Next, some applications shall be covered and state of the art technologies with hands on exercises will be provided to give insights.

#### COURSE CONTENTS

- Introduction to Artificial Intelligence and
   Machine Learning
- 2 Significant parameters and issues in Machine Learning
- 3. Machine Learning Algorithms
- 4 Applications of Machine Learning in various disciplines
- 5 Hands on sessions on relevant tools

#### **IMPORTANT DATES**

Submission of Registration form by 25.01,2019
Acceptance Notification by 30.01.2019

CONTACT DETAILS

Dr. Sandeep Singh Gill

Professor & Head

Department of Electronics & Communication Engg.

Guru Nanak Dev Engineering College

Gill Road, Gill Park, Ludhiana,

Punjab - 141006 E-mail:gndec.ece.qip@gmail.com

Phone: 0161-5064576(O)

#### PATRON

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

#### COORDINATOR (5)

Dr. Sandeep Singh Gill Prof. Tarandeep Singh

#### ORGANISING COMMITTEE

Prof. Ameeta Seehra Prof. Chahat Jain

Dr. Narwant Singh Prof. Kuldeepak Singh

Dr. Balwinder Singh Prof. Harminder Kaur Aulakh

Dr. Munish Rattan Prof. Daljit Singh

Dr. Baljeet Kaur Prof. Naazia Makkar

Prof. Harminder Kaur Prof. Preeti Pannu

Prof. Navneet Kaur Prof. Shivmanmeet Singh

Prof. Gurpurneet Kaur

QIP SHORT TERM COURSE ON

Machine Learning

Applications

in

Engineering

(4th-9th February, 2019)



#### COORDINATOR (s)

Dr. Sandeep Singh Gill Prof. Tarandeep Singh

Department of
ELECTRONICS & COMMUNICATION
ENGINEERING

Guru Nanak Dev Engineering College Gill Road, Ludhlana, Punjab-141006

> Phone: 0161-5064576 (O) E-mail: gndec.ece.qip@gmail.com

#### ABOUT THE INSTITUTE

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#### ABOUT THE DEPARTMENT

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 courses in Electronics and Communication Engineering and has around 15 scholars enrolled for doctorate in areas like Antenna Design, VLSI, Optical communication etc. 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 of the last 20 years and manning pivotal positions in Telecom operators in India, South East Asia, Pacific region and Africa. In the last two years, as a part of an academically autonomous system, the department has taken numerous quality initiatives including revamping of syllabi so that it is in tune with the outcome based system as proposed in the Washington Accord.

ECE Department is continuously maintaining strong International collaboration with outside world in form of joint research initiatives, editorial board memberships of reputed International journals, serving on academic bodies in various universities and industry institutes, joint research initiatives.

#### 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 e-mail to gndec.ece.qip@gmail.com

Shortlisting and confirmation of eligible candidates will be on a first come first served basis. Incomplete application forms will not be entertained. Registration forms should reach the coordinator by 25.01.2019.

#### ELIGIBILITY

Faculty members and research scholars of degree level engineering colleges recognized by AICTE are eligible to attend the course. Course being interdisciplinary in nature, faculty and research scholars of all engineering branches are eligible to apply.

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

#### TRANSPORT BOARDING & LODGING

Participants are entitled for II class (Sleeper Class) or AC railway fare to and fro by the shortest route from college to GNDEC, Ludhiana. Accommodation will be provided in the students Hostels or Guest House on sharing basis.

### QIP SHORT TERM COURSE ON

# Machine Learning Applications in Engineering

(4th-9th February, 2019)

#### **REGISTRATION FORM**

Name (in block letters)
Gender:
Qualification.
Designation/Department:
Organization:
Address:
Mobile:
Email:
Accommodation Required 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)

## **PROCEEDINGS**

TITLE: MACHINE LEARNING APPICATIONS IN ENGINEERING

DATE: February 04-08, 2019

An one week QIP Short Term Course on "Machine Learning Applications in Engineering" was conducted by Department of Electronics and Communication Engineering, Guru Nanak Dev Engineering College, Ludhiana from February 04-08, 2019.

The course was aimed to introduce the participants to Machine Learning and its various applications. The course planning for the course included the introduction, followed by the algorithms and applications of machine learning. State of the art technologies with hands on exercises were also planned for the course. Course being interdisciplinary in nature, faculty and research scholars of all engineering branches were eligible to apply. Dr. Sandeep Singh Gill and Er. Tarandeep Singh coordinated the course. An organising committee including the coordinators and faculty of the department of Electronics and Communication Engineering, Guru Nanak Dev Engineering College, Ludhiana was setup for the smooth running of the course. A total no. of 58 participants from various reputed colleges/universities such as NIT Jalandhar, GCET jammu, DKTGI Rahon, Thapar University Patiala, MRSPTU Bathinda and many more attended the course. Various experts from IIT Ropar, NIT Jalandhar, Bennett University Greater Noida and many more presented their expertise. Hands on exercises on MATLAB, WEKA and PYTHON were also provided to the participants. Experts from Guru Nanak Dev Engineering College, Ludhiana also took part in this platform to present their

The list of experts present for the course is presented in Table 1.

S. No	Name of Expert	College/University/Company
1	Dr Kanav Kahol	Pink Rickshaw Design, New Delhi
2	Dr. Kuldeep Singh Nagla	NIT Jalandhar
3	Dr. Kuldeep Kumar	NIT Jalandhar
4	Dr. Amit Kamra	GNDEC, Ludhiana
5	Dr. Sudarshan Iyengar	IIT Ropar
6	Er. Tarandeep Singh	GNDEC, Ludhiana
7	Er. Navjot Singh	AlertEnterprise, Chandigarh
3	Dr. Suneet Kumar Gupta	Bennett University, Greater Noida, U.P
)	Dr. Neeraj Goel	IIT Ropar
0	Dr. Mukesh Saini	IIT Ropar
1	Dr. Sandeep Singh Gill	GNDEC, Ludhiana

Table 1: List of Experts

The 5 day session workshop commenced on 04th Feb, 2019 with the inaugural ceremony and keynote address by Dr. Kanav Kahol, Chief Technical Officer, Pink Rickshaw Design, New Delhi. Everyday 3 sessions were planned for the experts. The sessions were a mixture of theory and practical.



gements for Tea and Lunch was present for the participants as well as experts. The details for y session has been listed below:

Session 1: Scope of Machine Learning

The session was the introductory session for the course. This session introduced the participants to machine learning and how machine learning is transforming lives nowadays. It also focused on the applications of machine learning in various disciplines. This session was aimed to create a sense of curiosity and motivation for the participants and it proved to do so.

Session 2: AI in Mobile Robotics: Focused on multi sensor data fusion

This was the 2<sup>nd</sup> session in row. It was focused on the application of AI and Machine Learning in Robotics. The concept of multi sensors being fused in robotics was discussed. This session concluded with the focus of ISRO and DRDO in this area.

Session 3: A Practical Approach to Research Methodologies in Machine learning

This session focused on the research areas in machine learning and the practical approaches to research in this area. The present scenario in research was discussed and new Possible research areas were also

Session 4: Transforming Machine Learning data through WEKA

This was a hands on session focused on WEKA. The participants were introduced to WEKA and were taught how to handle data in machine learning through WEKA. This session proved out to be very informative for the participants.

Session 5: Introduction to Machine Learning through motivational stories

This session targeted the motivation of the participants through some motivational stories in which machine learning had created a difference. A large no. of examples and proven stories were discussed with the participants where machine learning proved out to be very beneficial and large empires were setup on this concept

Session 6: Unsupervised learning algorithm that created a 500 billion dollar industry This was a hands on session on Python. This session started with the basics of Python and moved towards a certain algorithm that had helped to create a 500 billion dollar industry.

Session 7: Essentials of Machine Learning Algorithms

This session focused on various machine learning algorithms such as Random Forest, Support Vector Machine, Linear Regression, Logistic Regression, Decision Tree, Naive Bayes, kNN, K-Means and many more. The focus of this session was to introduce the participants to the basics of the actual algorithms working behind Artificial Intelligence and Machine Learning.

Session 8: Disruptive applications of AI in various industries with use cases and scientific solutions This was a hands on session on Python where various problems from industries were taken and their solutions through machine learning were taught to the participants.

Session 9: Alignment of Academic and Research in modern day AI based disruption and opportunity for application oriented research activities

This session was focused to understand the gap between academic and research in AI and machine learning and how both can be aligned in accordance to the modern day scenario.



## on 10: Basics of ML and AI

was a hands on session in MATLAB. This session focused upon the basics of Machine Learning d Artificial Intelligence in Matlab. This session also helped a lot to the participants as majority of the participants were familiar with the environment in MATLAB. The participants also worked on some examples on machine learning that helped to enhance their knowledge on the use of this tool for AI.

## Session 11: Hyperparameter Tuning

This session was focused on a very important topic i.e. to choose parameters on which the learning depends in machine learning algorithms. The algorithms discussed earlier were again reviewed but with an angle of learning parameters. The vision to these algorithms broadened after this session and participants were able to understand the nature of learning in various problems related to machine

## Session 12: Convolutional Neural Network, Recurrent Neural Network

This session focused upon the uses of Neural Networks in Machine Learning. Along with the theory, hands on sessions on examples based on Convolutional Neural Network and Recurrent Neural Network were discussed in this session.

## Session 13: Hardware architecture for Deep Learning Applications

This session was focused on the Hardware Architecture in Deep Learning. Along with the software or GUI Platform that's required for Machine Learning, the participants were able to understand the hardware requirements for AI through this session.

### Session 14: Advanced Surveillance Systems

This session focused on the applications of machine learning with focus on advanced surveillance systems. In this session, the traditional surveillance systems were discussed and light was thrown on the changes in these systems that machine learning could perform.

#### Session 15: Future of Artificial Intelligence and Machine Learning

This was the concluding session of the course. This session focused on the future aspects of Artificial Intelligence and Machine Learning. This gave the participants an idea that what could be expected from Machine Learning in the future.

The Five day course ended on 08th Feb, 2019 with the valedictory ceremony. The participants were given certificates for their participation and feedback was taken from them. Based on the positive feedback received, this course surely helped them to broaden their vision about machine learning and will pave new paths in research areas in the future.



# "Machine Learning Applications in Engineering" (February 04-08, 2019)

# Organized by Department of Electronics and Communication Engineering Guru Nanak Dev Engineering College, Ludhiana

# List of Candidates for participation

in.	Candidate	Organization	Designation/ Department	Address	Contact no.	E-mail ID	Signature
	Chitrarian Keuman Rai	7117 Irlandhes	Student/	MIT Johnshoo	7280776271	Chilsonymkson egral com	Dai
	S-fa-deepSingh	G CET Jammy	dectare, Mechanical	GCET Tammy	8713069184	settic pardeaps until quall	Chyladdi
1	Southel Gupta	DKTGI Rahon	A0, EC &	DKTGI Rahon	9877439474	Sahilworlds@ gmail.com	ani gri
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15		HITIJ V AU DHARY	INDE.L	Persons M-TECH	GNDEC ECE dipl	9418517171	kshitijaya@gnazil.com	rive (

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18	RATTAN	GN DEC	K.P.	GNDEC Ludhian	9855004325	dr. munish rattau @ gmail-co	m
19	Dosdicap Sirch	GNDEC Ludhidaa	Pursuing M-16th	CaNDEC Ludhiana	700 9719380	Dimmy SO Singh Bo grad com	Just egging
20	Taskied Sizi	CNDEC	Pursuiy M. Tech	ChDEC		josspreet sym@fmil	Jyhord J
21	Grunjit Kawn	GN DEC Walking	Prosning M. tech	GNDEC Mahiang	9914908043	Grajetkau 771@	Courjit Kour
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### About the GNDEC, Ludhiana.....

Guru Nanak Dev Engineering College (GNDEC) was established by the Nankana Sahib Educational Trust (NSET) in the year 1956. NSET was founded in the memory of the most sacred temple of Nankana Sahib, birth place of Guru Nanak Dev Ji. The main mission for establishing Guru Nanak Dev Engineering College was 'Removal of Economic Backwardness through Technology'. To fulfill this commitment, a unique admission criterion was adopted by NSET by reserving 70% seats for the students of rural areas. At present seven undergraduate and thirteen post graduate courses are being offered in Engineering apart from MBA and MCA. The college is an QIP centre for Ph.D. admissions by AICTE in Civil Engineering, Mechanical Engineering and Electrical Engineering.

## **About the Department.....**

Civil Engineering Department has been accredited since 2004 by NBA and also by NAAC. It is running three full time PG programmes (Structural Engineering.; Geotechnical Engineering.; Environmental Science and Engineering) and one part-time PG programme (Soil Mechanics and Foundation Engineering) along with UG programme in Civil Engineering in two shifts. The department has the state of art facilities for R&D activities and is actively engaged in providing consultancy services to different government and private sector in and around Punjab with an annual turnover of approximately Rs one crore. The department has been declared as QIP Centre for Ph.D by AICTE, New Delhi from the session 2011-2012 and is supported under the **FIST** scheme and **TEQIP-II** scheme *GOI*.

### **About the Course.....**

Design is an ever evolving process and it is entirely different now-a-days than it was few decades back due to the better understanding of the material behavior and development of new materials (models). Nevertheless, basic aim of the structural design process remains the same, i.e. to proportion and select various dimensions of the constituent members of the structural system and their other parameters, such as materials, shape, construction technique, etc. so that it must be able to fulfil its purpose with an adequate safety, serviceability and economy; the safety not only implies resistance to the external actions, but it also concentrates on the ductility and robustness of the system.

The material characteristics and its response to the loading play an important role in a design process. It is, therefore, essential that the designer must possess adequate knowledge about the material characteristics going to be used in the construction and their failure envelop describing the safe design stresses.

The course aims to refresh the fundamental concepts related to new and conventional structural materials, their material models and the design of buildings using reinforced concrete as structural material and appraise the participants about the latest developments in the design and practice of RC buildings through some live project/ hands-on-training/ assignments.

### **Course contents.....**

- New material developments
- Material models and the design process
- Fundamental concepts related to the design
- Design of RC members for shear, bending and torsion
- Practical considerations and codal guidelines

QIP sponsored
Short Term Training Program

On

Analysis and Design of RC Buildings:
Concepts and Practice

February 19 - 23, 2019



Organized by

Civil Engineering Department, Guru Nanak Dev Engineering College, Ludhiana (Punjab)- 141006

### How to Reach GNDEC, Ludhiana

The institute is located on Ludhiana-Malerkotla road (also, called Gill road) and is around 6 km from the Bus Stand and 7 km from the Ludhiana railway station. It is well connected to other parts of the country by both rail and road. Important trains, like Shatabdi Express, Rajdhani Express, Howrah Mail, Malwa Express, Golden Temple Mail, Pachim Express and Sachkhand Express halt at the Ludhiana railway station. Regular buses (both, AC and Non-AC) are available from New Delhi and Chandigarh. Nearest airport is at Chandigarh, which is around 100 km from the institute.

### **Resource Persons**

The course will be taught by faculties/experts from the local and near-by academic institutions. Experts from the field will also share their experiences during this course.

### **Eligibility**

The young faculty of Engineering Colleges / University departments and PG Research scholars with civil engineering background can attend the course. The number of participants will be restricted to 30 as per the QIP norms. The certificate of participation will be awarded to the candidates who fulfils the attendance requirements and successfully completes the assignments/ the project work and secures 70% marks in the evaluation.

### Accommodation

A limited number of rooms with shared accommodation are available in the guest house at Guru Nanak Dev Engineering College campus on request on 'first-come first-serve basis'.

## Registration

There is no registration fee for the participants and TA/DA will be paid to the out station participants as per the norms. Since the seats are limited, the registration will be done on *first-come first-serve basis*. The registration process will be considered complete only when the registration form is received from the participant through a proper channel by *15<sup>th</sup> February, 2019*. However, candidates may send an advance copy through email, post or by hand.

### **Organizing Committee**

#### Patron

Dr. Sehajpal Singh, Principal
Guru Nanak Dev Engineering College, Ludhiana

### **Advisors**

Dr K.S. Gill, Professor and Head, Dr H.S. Rai, Professor and Dean (Testing & Consultancy), Dr Harpal Singh, Professor, Department of Civil Engineering, Guru Nanak Dev Engineering College, Ludhiana

### **Coordinators**

Dr Gurdeepak Singh and Dr Inderpreet Kaur Department of Civil Engineering, Guru Nanak Dev Engineering College, Ludhiana

### **Faculty Coordinator**

Dr Harvinder Singh Professor, Department of Civil Engineering, Guru Nanak Dev Engineering College, Ludhiana

# Correspondence

Please mail the signed copy of the registration form at the email id: **hs.gndec @gmail.com**Contact no.— 9855965901, 9878190300 (Coordinators)
The hard copy can be addressed to the *Coordinator (STTP -16)*, *Civil Engineering Department, Guru Nanak Dev Engineering College, Gill Road, Ludhiana-141006*.

## Guru Nanak Dev Engineering College, Ludhiana

QIP sponsored Short Term Training Program On

# Analysis and Design of RC Buildings: Concepts and Practice

(February 19 - 23, 2019)

### REGISTRATION FORM

Name:
Designation:
Department:
Organization:
Address:
Tel./Mobile:
E-mail:
Academic Qualification with Specialization:
Accommodation: Required/Not required
Signature and Date:
Sponsorship Certificate
The applicant is hereby sponsored and will be allowed
to attend this course, if selected.

Signature and Seal

Date:....

# Analysis and Design of RC Buildings: Concepts and Practice

5 days QIP sponsored STTP, February 19-23, 2019 List of the participants

S. No.	Name	Mobile	e-mail ID	Signature
1	Amandeep Singh Gill	7087631549	Enggamengill Eyahoo.com	ASE
2	Amandeep Singh	9417398110	as godec @ gmail com	A
3	Bhupinder Singh	7986050831	bswelia 1/22 agredian	B.
4	Inderpreet Kaur	9878190300	Egmail. com	800
5	Mandeep Kaur	98550-59898	mandykhusal 28@ gmail. com	May
6	Manvinder Kingra	85580	Kingea · manui	nde mail marge
7	Sahibdeep Singh	7696100188	Rahilderpringhet	Lalub
8	Prabhjot Singh Pannu	9988991633	Chara. Can	JE JE
9	Prashant Garg	9914313435	prachaut ded	Mey.
10	Pritpal Kaur	8427106043	pritipal godec @gmail com	lpol
11	Sukhwinder Singh	98760-17282	SHAHJI 1991@ GMAIL . COM	8-
12	Sukhwinder Singh	98465-10717	subhuh der_ 5035@ Yahoa.	8
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14	Yuvraj Singh	9815830889	uvgraj_23@ yalooco.in	62
15	Sarvesh Kumar	8283827985	Samoch Kambai	SE 19019
16	Satinder Kaur Khatra	1 1 1 1 1 1 1 1		
17	Ranjodh Singh	9872465866	transpodh6051@	fyedh h
18	Satnam Singh	9888213137	SATNAMSINGH 517@GMAIL.com	2
19	Jasveer Singh	9780145434	Jarvirsinghage @gmail. com	loz.

# Analysis and Design of RC Buildings: Concepts and Practice

5 days QIP sponsored STTP, February 19-23, 2019 List of the participants

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# Analysis and Design of RC buildings: Concepts and Practice

### REPORT

A five day short term training program on 'Analysis and Design of RC buildings: Concepts and Practice' was started at Guru Nanak Dev Engineering College, Ludhiana. It is being conducted by the Civil Engineering Department of the college under Quality Improvement Program of AICTE, Govt. of India with an aim to polish and develop the necessary structural design skills in the faculty and research scholars participating in the training program. Head of the department Professor K S Gill extended a warm welcome to the delegates and briefed the audience about the program and other associated activities. Faculty coordinator of the program Dr. Harvinder Singh informed that the outcome of the course will upgrade the skills of the participants to come up with better structural systems for new buildings coming up in the region and help the local community to built better and sustainable houses. Because, in the Ludhiana a lot of construction activities are coming up as the Smart city project being implemented by the Govt. in the city is moving toward its culmination. This becomes the need of the hour as the design is an ever evolving process and it is entirely different now-a-days than it was few decades back due to the better understanding of the material behavior and development of new materials. Nevertheless, basic aim of the structural design process remains the same, i.e. to build safe-durable structures but advances in the material technology helps greatly to reduce the associated costs. In its first day, the experts appraised the participants about the new developments in the geotechnical investigations and the minute details of the concrete production techniques and how it helps to the designers to plan their buildings to reduce the cost of the buildings without investing anything extra and ensured their durability and reduces the cost associated with the repair and maintenance.

> Dr. Harvinder Singh Coordinator, STTP

Analysis and Design of RC buildings: Concepts and Practice

### 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 let 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
- \* Sonward 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 Ludhlana

IMPORTANT DATES Submission of Registration form by 31.05.2019 31.05.2019
Acceptance Notification by
04.06.2019
DATE & VENUE FOR REGISTRATION
10.06.2019 (9AM) at TCC Seminar Hall,

GNDEC, Ludhlana

CONTACT DETAILS Dr. Baljeet Kaur

Assistant Professor, Department of Electronics & Communication Engineering

Guru Nanak Dev Engineering College Cill Park, Ludhiana.
Punjab – 141006
mail:gndec.ece.fdp@gmeil.co
Phone: O161-5064768 (O)

### CHIEF PATRON

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

### PATRON Prof. Ameeta Seehra

Head, Department of Electronics & Communication Engineering

#### DRGANISING COMMITTEE Prof. Daljit Singh

Prof. Simranjit Kaur

Prof. Tarandeep Singh

Prof. Preeti Pannu Prof. Shivmanmeet Singh

Prof. Harsimranjit Singh Prof. Gurinder Singh

Prof. Kirandcep Kaur

Prof. Shyna Kalra

Prof. Harleen Kaur

Prof. Sandeep Thakur (ABVGIET, Pragatinagar) (ABVGIET, Pragatinagar)
Prof. Anjali Bharti
(ABVGIET, Pragatinagar)
Dr. Narwant Singh
Dr. Balwinder Singh Dr. Munish Rattan Prof. Navneet Kaur

Prof. Gurpurneet Kaur Prof. Chahat Jain Prof. Kuldeepak Singh Prof. Harminder Kaur Aulakh

# ONE WEEK TEQIP- III SPONSORED FACULTY DEVELOPMENT PROGRAMME

OM

"Enabling Technologies for Wireless and Optical Networks"

(10"-14" June, 2019)



Coordinator Dr. Baljeet Kaur

Co-Coordinator Prof. Harminder Kaur

Organized by Department of Electronics and Communication Engineering

Guru Nanak Dev Engineering College Gill Park, Ludhlana, Punjab – 141006 E-mail: gndec.ece.fdp@gmail.com Phone: 0161-5064768(O)

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 strving 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 (OIP) 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 ABVGET offers technical education in three disciplines B Tech. Polytechnic and TIP Presonity, CSE and EE in polytechnic III is running five courses i.e. Electrical. Electricals, Fitter, Draughtaman and Motor Vehicle Machanica.

#### 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 dopartment 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 31.05.2019

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. ONE WEEK TEQIP- III SPONSORED FACULTY DEVELOPMENT PROGRAMME ON

# "Enabling Technologies for Wireless and Optical Networks"

(10"-14" June, 2019)

DECISTRATION FORM

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Signature of Participant

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

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

# Report of FDP

(TEQIP-III sponsored one week faculty development programme)

Name: "Enabling Technologies for Wireless and Optical Networks"

Date: 10th - 15th June, 2019

Venue: Testing and Consultancy seminar Hall

# Course content:

- Fundamentals of Wireless Communication
- Recent advances in wireless communication
- Introduction to Cognitive Radio and spectrum sensing
- Software Defined Radio
- Intelligent networks
- Necessity of optical communication and
- WDM/DWDM Techniques & Components
- Non Linear Effects in Optical fibers
- Optical networks-Overview and Recent Developments
- Future in home optical network using POF
- Software tools for research
- Visit to Videocon Telecom Limited Ludhiana

Nothing in the world gives us more power and confidence than having information. The ability to communicate information is essential to achieve the successful advancement of humankind. In today's world the most vital source of transferring information worldwide are optical and wireless communication media. So keeping in view the same, this FDP was organized in Twinning with Atal Bihari Vajpayee Govt. institute of engineering and technology Pragatinagar, Shimla.

The FDP was planned for six days from 10<sup>th</sup> to 15<sup>th</sup> june. The programme was divided into 20 + technical sessions, which were engaged by the guest speakers from reputed institutes like IIT ropar, iit jammu, nit delhi, nit kurukshetra, nitttr Chandigarh besides neighbouring institutes like thapar, gndu, and Punjabi university,patiala to give insight about the trends in this field. The main topics covered in the course were Fundamentals of Wireless and optical Communication, Recent Advances in Wireless and optical networks, SDR, Optical Computing with Network of Coupled Lasers, wireless sensor networks, MIMO and Cognitive Radio and spectrum sensing.

Lab sessions were also scheduled to give the idea about latest research software tools to the participants, a field visit to Videocon telecom limited was also a one of the impactful session of this course.

Participants from many institutes of repute. host institutes and other institutes like NIT jalandhar, Punjabi University Patiala, SLIET Longowal, LPU Phagwara, LGC Chownkimaan, MIMIT Malout. KCET Amritsar, HIET Shahpur, Himachal Pradesh.

Course coordinator

Dr.Baljit Kaur

Course co-coordinator

Prof. Harminder Kaur

# One week TEQIP-III sponsored Faculty Development Programme on "Enabling Technologies for Wireless and Optical Networks" June10-15, 2019

# Organized by Department of Electronics and Communication Engineering Guru Nanak Dev Engineering College, Ludhiana

(b) Certificate Receiving

Date 15-06-2019

S.No.	Name	Institute	Signature of Participant
1	Dr.Vikas Singla	MIMIT, Malout	Special
2	Gurinder Singh	GNDEC, Ludhiana	
3	Dr.Harsimranjit Singh Gill	GNDEC, Ludhiana	grun
4	Monika Rani	PTU, Jalandhar	Ahrlan,
5.	Kanwaljeet Singh	LPU, Phagwara	16102
6	Sukhwinder Singh	GNDEC, Ludhiana	2
7	Karan Bhalla	GNDEC, Ludhiana	A
8	Harminder Kaur	GNDEC, Ludhiana	Hean
9	Loveleen Kaur	Khalsa College of Engg. & Technology, Amritsar	· Acces
10	Harminder Kaur	Khalsa College of Engg. & Technology, Amritsar	Harry 10/13
11	Harleen Kaur	GNDEC, Ludhiana	HA)
12	Akanksha Sharma	ABVGIET, Pragati Nagar, Shimla	dry
-13	Anshika Salaria	ABVGIET, Pragati Nagar, Shimla	Daisbrita

	Niv	vedita Kashyap	ABV( Shim		(Nive)
3	Aı			GIET, Pragati Nagar, nla	Anjali
6	N			VGIET, Pragati Nagar, mla	- fair
	+	Sidharth Pandit	ни	ET,Shahpur	Blank
18	+	Gurjot Singh	LP	U, Phagwara	69
19		Kuldeepak Singh	Gì	NDEC, Ludhiana	· April
20		Daljit Singh	G	NDEC, Ludhiana	
21	-	Kuldeep Kaur	G	SNDEC, Ludhiana	<b>9</b>
22		Preeti Pannu	C	GNDEC, Ludhiana	reet
23	<u> </u>	Simranjit Kaur	(	GNDEC, Ludhiana	Dane
24	4	Gurpurneet Kaur		GNDEC, Ludhiana	John
25	.5	Kirandeep Kaur	r	GNDEC, Ludhiana	WZ
<u>:</u>	26	Maini		GNDU, RC, Jalandhar	Cilus
	27			Punjabi University, Patiala	MAN
	28			GNDEC, Ludhiana	8

29	Dr.Balwinder Raj	NIT, Jalandhar	B-G
30	Gagandeep Kaur	GNDEC, Ludhiana	- Start
31	Dr.Balwinder Singh Dhaliwal	GNDEC, Ludhiana	BAholer
32	Dr. Vijay Kumar Samyal	MIMIT, Malout	Mas
33	Harmandeep Kaur	LGC-Polytechnic, Chaukimann	+ Kam
34	Dr. Narwant Singh Grewal	GNDEC, Ludhiana	SAI
35	Bhawna	GNDEC, Ludhiana	
36	Arshdeep Kaur	GNDEC, Ludhiana	dich.
37	Gagandeep Kaur Gill	GNDEC, Ludhiana	( Jul
38	Harleen Kaur	GNDEC, Ludhiana (EE)	Harth
39	Daljeet Singh	GNDEC, Ludhiana (CSE)	
40	Dr. Baljeet Kaur	(Coordinator) GNDEC, Ludhiana	Loud
41	Harminder Kaur	(Co-coordinator) GNDEC, Ludhiana	90