# GURU NANAK DEV UNIVERSITY REGIONAL CAMPUS, FATTU DHINGA

### INTRODUCTION

Guru Nanak Dev University Regional Campus, Fattu Dhinga (Sultanpur Lodhi) Distt. Kapurthala was established in year 2011 for promoting technical education in the rural area of Punjab. This Regional Campus is located in Village Fattu Dhinga, District Kapurthala, Punjab on Kapurthala – Sultanpur Lodhi Road in the Lap of pristine nature which adds to the beauty and glory of the Institution. This campus has a sprawling area of 25 acres of land. Surrounded by lush green land, the campus of the institute extends a beautiful and well developed area with many topographically featured picturesque landscape. The campus presents a spectacle of harmony and natural beauty.

Presently, this campus is comprised of four departments: Department of Electronics Technology, Department of Computer Engineering and Technology, Department of Computer Science & Applications, and Department of Commerce. These departments are well equipped with laboratories related to different fields of Electronics and Communication Engineering as well as four big computer labs.

A Research and Development Lab has been setup at the campus for promotion of quality research in the fields of Wireless Communication, Optical Fibre Communication, Digital Image Processing, Wireless Sensor Networks, Internet of things, Big data etc. This R & D lab is equipped with research oriented software such as MATLAB, Opti System, Opti SPICE, Net Sim PSPICE, Lab View, NI Image processing machine vision hardware module, NS 2, NS 3, Weka, Java, C++, Microsoft SQL etc. All faculty members of the campus are doing their Ph.D. research work in the above mentioned fields. Students of B. Tech (ECE & CSE) and MCA (TYC) are also doing their major projects and six month training project in this lab.

Seminars, Lectures by resource persons, awareness camps, debates, quiz competitions, educational tours, women empowerment, Tree plantation drives and capacity building programs are integral part of the study at Regional Campus, Fattu Dhinga (Sultanpur Lodhi). Having been taught by one of the best faculties of the region, the students of RC Fattu Dhinga (Sultanpur Lodhi) have been empowered and groomed to take on the rigorous challenges in their upcoming lives. The Regional Campus is a perfect blend of curricular and extra-curricular activities where the students and teachers freely interact to uplift the standards of education under the aegis of Educational and Cultural Society. Technical Student Forum is active to organize different activities related to enhance the technical and personality development skills of the students. Students are also encouraged to participate in various sports activities. The placement record of B. Tech. (ECE & CSE) final year is also marvellous. Large number of final year students are recruited by well-known companies such as Tata Consultancy Services, Tech Mahindra, Cape Gemini, CSC, Videocon etc.

## **FACULTY**

**OSD:** Derick Engles, Ph.D.(Professor)

Assistant Professors: Kuldeep Singh, M.E. (ECE); Jaspreet Kaur, M.Tech. (ECE);

Rajandeep Singh, M.Tech. (Communication Systems); Rajandeep Singh, M.Tech. Communication Systems);

Amandeep Kaur Cheema, M. Tech (CSE); Gurpreet Singh, M. Tech. (CE)

Assistant Professors: Amandeep Singh, M.Tech (ECE); Gurhans Singh, M.Tech (CSE); Mandeep Kaur,

(Part Time): M.Tech.(CSE); Amanjit Kaur, M.Tech.(CSE); Harpreet Kaur, MCA; Shabnam

Parveen, MCA; Karanbir Kaur, MCA; Jatinder Kaur, MCA; Kuldeep Kaur, MCA; Kiranpreet Kaur, M.Sc. (Physics); Vimal Dev Sethi, MA(English); Dinesh Kumar, MA(Punjabi); Sandeep Kaur, MA(Punjabi); Sharanjit Kaur, M.Sc. (Maths); Sharuti, MA(English); Pallavi, M.Com; Baljeet Kaur, M.Com; Prabhjot Kaur, M.Com; Sandeep Kaur, M.Com; Parminder Kaur, M.Com;

Navneet Kaur, M.Com

# ACHIEVEMENTS (FELLOWSHIP/HONOURS/AWARDS BY ACCREDITED/PROFESSIONAL BODIES)

Name of Student	Class	Achievements
Kiranpreet Kaur,	B.Tech ECE 2 <sup>nd</sup> Semester	All Students obtained merit
Ramandeep Kaur	B.Tech ECE, 2 <sup>nd</sup> Semester	positions in the merit list of the
Suman	B.COM, 4 <sup>th</sup> Semester	University
Kiranpreet Kaur	B.COM. 4 <sup>th</sup> Semester	

### PAPERS PUBLISHED IN PEER REVIEWED JOURNALS

- 1. Kuldeep Singh and Jaspreet Kaur, (2017) Machine Learning based link cost estimation for Routing Optimization in Wireless Sensor Networks, Advances in Wireless and Mobile Communications, Vol. 10, No. 1, pp. 39-49. ISSN: 0973-6972.(UGC Indexed)
- 2. Jaspreet Kaur and Kuldeep Singh, (2017) Size and Color Based Quality Assessment of Maize Grains, International Journal on Computer Science and Engineering (IJCSE), Vol. 9, No. 3, pp. 102-108, ISSN: 0975-3397. (UGC Indexed)
- 3. Amandeep Kaur and Kuldeep Singh, (2017) Performance Analysis of AODV Protocol with TCP/FTP Traffic and Improved AODV Protocol with UDP/CBR Traffic for Optimizing Routing and QoS in MANET, International Journal of Advanced Research in Computer Science, Vol. 8, No. 3, Pp. 596-601, ISSN: 0976-5697. (UGC Indexed)
- 4. Kuldeep Singh and Amandeep Kaur, (2017) Performance Evaluation of DSR, AODV, ZRP, and OLSR routing protocols for unreliable and dynamically changing Wireless Sensor Networks, Journal on Communication Engineering and Systems, Vol. 6, No. 2, Pp. 33-40, Feb- April 2017. ISSN: 2277-5102. (UGC Indexed)
- 5. Jaspreet Kaur and Rajdeep Singh Sohal, (2017) Multi Sensor based Biometric System using Image Processing, in Research Journal of Engineering and Tech. (RJET) vol. 8(1), ISSN No. 0976-2973 (Print).
- 6. Rajdeep Singh Sohal and Jaipreet Kaur, (2017) Distance Based Node Localization and Tracking of "Off-Road Vehicle Racing" With Gauss-Newton Algorithm, i-manager's Journal on Communication Engineering and Systems, 6(1), 1-8. (UGC Indexed)
- 7. Rajandeep Singh and Maninder Lal Singh, (2017) Performance evaluation of S-band Thulium doped silica fiber amplifier employing multiple pumping schemes, Optik International Journal for Light and Electron Optics, Volume 140, Pages 565-570. (Thomas-Reuters)
- 8. Gurpreet Singh, Amandeep Kaur and Nishant Kapoor, (2017) Performance Evaluation of Routing Protocol in Internet of Things using NETSIM, International Journal of Advanced Research in Computer Science, Vol. 8, No. 3, ISSN: 0976-5697. (UGC Indexed)
- 9. Gurpreet Singh and Rajat Khurana, (2017) Performance Evaluation of DSR, OLSR and ZRP using NETSIM Simulator", International Journal of Advanced Research in Computer Science, Volume 8, Number 3. (UGC Indexed)
- 10. Gurpreet Singh and Ishita Vinod Kapoor, (2017) Performance Evaluation of ZIGBEE Routing Protocols Using NETSIM Simulator, International Journal of Advanced Research in Computer Science, Volume 8, Number 3. (UGC Indexed)
- 11. Gurpreet Singh and Hardeep Singh, (2017) Performance Evaluation of MANET Routing Protocols using NETSIM, i-manager's Journal on Information Technology, Volume 5, Number 5. (UGC Indexed)
- 12. Hardeep Singh and Gurpreet Singh, (2017) BIG DATA-A REVIEW", i-manager's Journal on Information Technology, Volume 5, Number 5. (UGC Indexed)
- 13. Gurpreet Singh and Rajat Khurana, (2017) Improved Performance of DSR PROTOCOL in Node Failure in MANET using NETSIM, i-manager's Journal on Information Technology, Volume 6, Number 3. (UGC Indexed)

14. Gurpreet Singh and Rajat Khurana, (2017) Zigbee - A Conceptual Study, i-manager's Journal on Mobile Applications and Technologies, Volume 4, Number 1. (UGC Indexed)

## PAPERS PUBLISHED IN NON PEER REVIEWED JOURNALS

- 1. Baljinder Kaur, Ramandeep Kaur and Rajandeep Singh, (2017) Broadband Passive Optical Networks (BPON): A Review", In International Journal of Emerging Technologies in Engineering Research (IJETER), Volume-5, Issue-7.
- 2. Parminder Kaur, Ramandeep Kaur and Rajandeep Singh, (2017) The Next generation Passive optical networks: A review, In International Journal of Emerging Technologies in Engineering Research (IJETER), Volume-5, Issue-8.

## PAPERS PUBLISHED IN INTERNATIONAL CONFERENCE PROCEEDINGS

1. Rajdeep Singh Sohal and Vinit Grewal (2017) WiMAX Quality of Service Classes-A Review, in International Conference on Advancements in Science & Technology, University School of Sciences, Rayat-Bahra University, Mohali, Punjab, India, 21 April, 2017.

## INTERNATIONAL CONFERENCES ATTENDED

1. Rajdeep Singh Sohalattended International Conference on "Advancements in Science & Technology", University School of Sciences, Rayat-Bahra University, Mohali, Punjab, India, 21 April, 2017.

# PAPERS PRESENTED IN INTERNATIONAL CONFERENCES

1. Rajdeep Singh Sohal presented paper "WiMAX Quality of Service Classes-A Review", in International Conference on "Advancements in Science & Technology", University School of Sciences, Rayat-Bahra University, Mohali, Punjab, India, 21 April, 2017.

## ATTENDED WORKSHOPS/ SEMINARS/ SYMPOSIA/ORIENTATION COURSES/ REFRESHER COURSES

1. Rajandeep Singh, attended One week AICTE recognized Short term course on Repair and maintenance of electronic measuring instruments Held by NITTTR Chandigarh held in ECE Department Punjabi University Patiala.09/01/2018 to 13/01/2017.

# INVITED LECTURES/ EXTENSION LECTURES/TALKS/ CHAIRING A SESSION/ DISCUSSANT

1. Rajandeep Singh delivered lecture titled 'Semiconductor Lasers and optical communication.' at Short term training course laser development and applications held at GZSCCET Bathinda in collaboration with NITTTR Chandigarh, 05th July, 2017.

# DETAILS OF SEMINAR/CONFERENCE/WORKSHOP/INVITED LECTURES/ COURSES/SYMPOSIA ORGANISED BY THE DEPARTMENT

- 1. Er. Abhishek Awasthi (Engineer at Capgemini, Noida) and Er. Amish (Former Engineer at Tech Mahindra ,Banglore) have interacted with students of B.Tech (ECE & CSE) and MCA(FYIC) at GNDU RC Fattu Dhinga on 17.04.2017. Both Abhishek and Amish are alumni of GNDU RC Fattu Dhinga (B.Tech ECE 2011-15 batch passout).
- 2. A Workshop on Recent Trends in Software Technology was conducted on 18/08/2017 by Er. Pushpal Singh, Smartwiz Technologies, Mohali. Topics covered are:

  Basics of C++, Basic and advanced concepts of Java with programing examples, development of GSM based anroid app.
- 3. One Day Technical Exhibition on latest trends in Electronics, Computers and Commerce fields for making awareness about technical and professional education among the students of rural areas. Approximately 500 students of GSSS Fattu Dhina, GSSS Tibba, GSSS Kheeranwali, BST Sr. Sec. School Sujjo Kalia, Prince Model School Fattu Dhinga, GSSS Fattu Dhinga and Guru Amardas Public School Ucha Bet (Distt. Kapurthala) participated in this exhibition. This exhibition was organized on 02 November, 2017 on the occasion of annual foundation day of GNDU Regional Campus Fattu Dhinga (Sultanpur Lodhi).