

**LIST OF PROJECTS FOR SUMMER TRAINING/INTERNSHIP DURING 18.05.2019
TO 22.07.2019 AT NIT HAMIRPUR**

DEPARTMENT	FACULTY	PROJECT
Computer Science & Engineering	Dr. Kamlesh Dutta	<ol style="list-style-type: none"> 1. Natural Language Processing 2. Automation and App Development 3. Information Security
	Dr. Narottam Chand Kaushal	<ol style="list-style-type: none"> 1. Mobile Computing 2. Internet of Things 3. Information Security
	Dr. T.P. Sharma	<ol style="list-style-type: none"> 1. Fault Tolerance in WSNs/VANETs 2. Data Dissemination in IOVs/VANETs
	Dr. Siddhartha Chauhan	<ol style="list-style-type: none"> 1. Simulation of Routing Protocols for WSNs in OMNET++ 2. Simulation of Adhoc Network Protocols in OMNET++
	Dr. Naveen Chauhan	<ol style="list-style-type: none"> 1. Mobile Wireless Network 2. Office Automation for Academic Institutions
	Er. Rajeev Kumar	<ol style="list-style-type: none"> 1. Wireless sensor networks 2. Information Security
	Dr. Pardeep Singh	<ol style="list-style-type: none"> 1. Text Summarization 2. Natural Language Processing
	Dr. Nitin Gupta	<ol style="list-style-type: none"> 1. Resource Allocation in Next Generation wireless Networks like CRN, VANETs, VAV, Cloud Age and Fog Computing 2. Comprehensive Survey of Few Upcoming Topics in Next Generation Networks
	Dr. Lokesh Chouhan	<ol style="list-style-type: none"> 1. Internet on Things 2. Network and Cyber Security 3. E-Governance 4. Mobile Banking and e-Payment
	Dr. Nagendra Pratap Singh	<ol style="list-style-type: none"> 1. Medical Image Processing 2. Pattern Recognition 3. Machine Learning Based Techniques
	Dr. Dharmendra Prasad Mahato	<ol style="list-style-type: none"> 1. Load Balancing in NVNL (Non Volatile Machine) Based Systems 2. Transaction Processing using Persistent Memory Concept
	Dr. J. Chandra Shekar	<ol style="list-style-type: none"> 1. Bitcoin Trend Prediction Using Machine Learning 2. Efficient Energy Consumption Techniques in Fog Computing Environment 3. Development of Automation Model for NIT Hamirpur
	Dr. Basant Subba	<ol style="list-style-type: none"> 1. Network Security 2. Machine Learning
Dr. Prakash Choudhary	<ol style="list-style-type: none"> 1. Image Annotation 2. Natural Language Processing 3. Medical Image 	

Electrical Engineering	Dr. R.K. Jarial	<ol style="list-style-type: none"> 1. To design & develop a wireless alarm system for ensuring proper irrigation, soil condition and protection against harmful vermin in hilly areas. 2. To carry on field investigations to design and develop real time monitoring of power apparatus located in a substation at NIT Campus using IOT. 3. To study impact of non uniformity of surface finish, air atmospheric conditions, electrode shape and pollution deposits on the performance of 11KV transmission line insulators in a high voltage laboratory.
Civil Engineering	Dr. R.K. Dutta	<ol style="list-style-type: none"> 1. Bearing capacity of soil by soft computing techniques
	Dr. V.S. Dogra	<ol style="list-style-type: none"> 1. Hydrus based irrigation scheduling 2. Computation of evapotranspiration using crop-wat.
	Dr. Vijay Kumar Bansal	<ol style="list-style-type: none"> 1. Repetitive scheduling.
	Dr. K. Nallasivam	<ol style="list-style-type: none"> 1. Dynamic analysis of railway steel plate girder bridge/truss girder bridge/composite box girder bridge with track system due to railway train vehicle by finite element techniques 2. Dynamic analysis of tall structure like electrical tower with cable/telecom tower/light post/chimney/wind mill due to wind and seismic load by finite element techniques 3. Dynamic analysis of machine foundation due to time varying operating force by finite element techniques 4. Dynamic analysis of dam due to hydrodynamic and earth quake load by finite element techniques 5. Dynamic analysis of cable stayed bridge due to vehicle, wind and earth quake load by finite element techniques 6. Dynamic analysis of rigid concrete pavement due to highway / airline vehicle, temperature warping and earth quake load by finite element techniques 7. Dynamic analysis of highway t-beam deck slab bridge /slab bridge/ masonry arch bridge due to vehicle by finite element techniques
	Dr. Amrit Kumar Roy	<ol style="list-style-type: none"> 1. Wind Energy for domestic usage 2. Dynamic response of tall building due to wind load by CFD simulation
	Dr. Joy Pal	<ol style="list-style-type: none"> 1. Identification of source of AE of a plate type of structure 2. Identification of loosening of bolts in steel frame structures.
	Dr. Joseph Tripura	<ol style="list-style-type: none"> 1. Watershed delineation using DEM/Spatial Analyst using Arc GIS.

	Dr. Subhadip Biswas	1. Lateral Placemat of vehicles under mixed traffic condition.
Chemical Engineering	Dr. RadheShyam	1. CFD study of Flow and Heat Transfer over variously shaped bluff bodies 2. Heat Transfer studies over a corrugated cylinder placed in Bingham plastic fluid
	Dr. Leela Manohar	1. Development of polymer composites for CO ₂ reduction to fuel. 2. Synthesis of Nano-catalysts for electrochemical reduction of CO ₂ .
	Dr. Tapas Palai	1. Bioconversion of Heavy Metals from contaminated Water 2. Adsorption of Heavy Metals on suitable adsorbents 3. Estimation of diffusion coefficients of organic solvents using Stefan Method
	Dr. Arvind K. Gautam	1. The preparation of Fe-doped TiO ₂ nano-particles. 2. Development of short NPT Programing code for ising model. 3. Preparation and characterization of fragrance be extracting the essential oils.
Chemistry	Dr. Jai Prakash	1. Synthesis of Polymer nanostructures
Centre for Material Science & Engg.	Prof. Ravi Kumar	1. Growth of transparent conducting ZnO:Al thin films by Pulsed Laser deposition for optoelectronic applications. 2. Structural, optical and magnetic properties of CuS based semiconductor nanoparticles.
	Dr. Vikram Verma	1. Structural and Optical characterization of Titania-Zirconia based nano-composites. 2. Temperature dependent transport and magnetic properties of rare earth doped transition metal oxide. 3. Structural, magnetic and electrical properties of Chromium based spinal oxides. 4. Effect of rare earth doping on the optical and magnetic properties of NiO thin films prepared by Pulsed Laser deposition technique.

The candidates can also apply in the department/centre/project which is not mentioned in the list. If the facility/faculty will be available in the willing area (other than mentioned in the list of projects or department/centre), the candidate will be permitted to do Internship in that department/centre of NIT Hamirpur (HP).