

## LIST OF PROJECTS FOR SUMMER TRAINING/INTERNSHIP AT NIT HAMIRPUR

DEPARTMENT	FACULTY	PROJECT
<b>Computer Science &amp; Engineering</b>	Dr. Narottam Chand	1. Automation of Academic and Administrative Processes of NIT Hamirpur 2. Information Security
	Dr. Kamlesh Dutta	1. Customization of open source CMS for NIT Hamirpur 2. Android security
	Dr. T.P. Sharma	1. Website redevelopment at Computer Centre 2. Online salary statement and status of NIT Faculty/staff
	Dr. Siddhartha Chauhan	1. Online student registration for NIT Hamirpur under Digital India Initiative (knowledge of Java/Python/ASP/PHP)
	Dr. Naveen Chauhan	1. Software Module development/website development of IIIT Una 2. Mitigating the challenges through wireless Networks
	Er. Rajeev Kumar	1. Web Development 2. Android app development 3. Wireless sensor networks
	Dr. Pardeep Singh	1. Implementation of stemmer for Hindi Language
	Dr. Madhu Kumari	1. Use of Python on NLP
	Dr. Lokesh Chouhan	1. Security Issues of Internet of Things 2. Plant and herb detection for medical purpose
	Mr. Rati Bhan	1. Soot Analysis : Study about various technique of transformation/instrumentation/optimization 2. Handling of Obfuscated code 3. Malware Signature/Certificate sharing
	Ms. Shilpi Sharma	1. Internet of Things
	Ms. Nisha Thakur	1. Security in Wireless Sensor Networks
<b>Electronics &amp; Communication Engineering</b>	Dr. Maneesh Kumar Singh	1. Acoustic Noise Cancellation for Hearing Aids and Speech Assistive Devices
<b>Mechanical Engineering</b>	Dr. Siddhartha	1. Simulation of Erosion Wear using ANSYS
	Dr. Somesh Kumar Sharma	1. Learning and modernization of meteorological laboratory
	Dr. Santosh	1. Testing of two stage solar furnace
<b>Electrical Engineering</b>	Dr. Ravinder Nath Sharma	1. Automatic Recognition of Himachali dialects
	Dr. R.K. Jarial	1. Ascertaining Health Index of Power Transformers. 2. Elevation of conditions assessment of Power Transformers. 3. High Voltage Testing of Electrical Insulations. 4. Investigations on dialectic properties of Electrical Insulation used in Power Transformers.

	Dr. B.B. Sharma	1. Analysis and Control of Vibrations in Elevator System for Human Comfort
	Dr. Himesh Handa	1. Stability and synchronization of chaotic/hyperchaotic systems
	Dr. Amit Kaul	1. "Image restoration using sparse restoration "
<b>Civil Engineering</b>	Dr. Pardeep Kumar	1. Finite Element Analysis of concrete Structures 2. Finite Element Analysis of Masonry Structures 3. Analysis and design of multi-storeyed RCC building using software 4. Analysis and Design of Industrial Structures 5. Analysis and Design of Retaining walls for live field projects 6. Non destructive Testing of concrete and Masonry Structures 7. Retrofitting and strengthening of Masonry Buildings 8. Light weight prefab construction
	Dr. V.S. Dogra	1. Modeling techniques for Irrigation Scheduling 2. Ground water augmentation Investigation using Empirical models 3. Climate Change models and Application
	Dr. Vijay Kumar Bansal	1. GIS application in construction
	Dr. U.K. Pandey	1. "Analysis and Design of Structure in STAAD-PRO"
	Dr. K. Nallasivam	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 / air line 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

		<ol style="list-style-type: none"> <li>Dynamic analysis of storage structure like elevated water tank/cooling tower/ swimming pool/silo/ bunker/retaining wall due to storage load , wind and seismic load by finite element techniques</li> <li>Dynamic analysis of ocean off shore structure due to hydrodynamic and earth quake t-sunami , wind load by finite element techniques</li> <li>Static and dynamic analysis and design of house building/ industrial building due to various load by finite element techniques</li> </ol>
<b>Chemical Engineering</b>	Dr. RadheShyam	<ol style="list-style-type: none"> <li>Study of Flow and Heat Transfer Behavior in a Porous Media</li> <li>Heat Transfer Enhancement from Solar Air Heaters</li> </ol>
	Dr. Tapas Palai	<ol style="list-style-type: none"> <li>Bioconversion of Heavy Metals from contaminated Water</li> <li>Adsorption of Heavy Metals on suitable adsorbents</li> <li>Estimation of diffusion coefficients of organic solvents using Stefan Method</li> </ol>
<b>Chemistry</b>	Dr. Pamita Awasthi	<ol style="list-style-type: none"> <li>Computational designing of IH Analogues as a Potential IGR for Silk Moth – A rational approach to enhance silk production</li> </ol>
	Dr. Bharti Gaur	<ol style="list-style-type: none"> <li>Easy Access to photovoltaic materials</li> <li>Synthesis and photo physical properties of indole based derivatives</li> </ol>
	Dr. Raj Kaushal	<ol style="list-style-type: none"> <li>Cobalt Chalcone complexes as potential antidiabetic agents</li> <li>Synthesis and Characterization of titanium phenoxides</li> </ol>
	Dr. K.S. Ghosh	<ol style="list-style-type: none"> <li>Nano particles and their application in biotechnology</li> <li>Synthesis of nanomaterials for biomedical applications</li> </ol>
	Dr. Jaibir Kherb	<ol style="list-style-type: none"> <li>Synthesis and Characterization of silica nanoparticles</li> <li>Use of semiconductor quantum dots in solar cells</li> <li>Gold nanoparticles : Applications in disease diagnosis</li> </ol>