S. No.	Code	Course Title	L	T	P	Contact Hrs./Wee k	Credits
1	SET/CS/BT/C701	Artificial Intelligence	3	1	-	4	3
2	SET/CS/BT/C702	Embedded System	3	1	-	4	3
3	SET/CS/BT/C703	Wireless and Mobile Computing	3	1	-	4	3
4		Elective I	3	1	+-	4	3
5		Elective II	3	1	1	4	3
6	SET/CS/BT/C706	Artificial Intelligence Lab	-	1-	1	2	1
7. Sept	SET/CS/BT/C707	Embedded System Lab	-	1-	1	2	1
8	SET/CS/BT/C708	Project Work - I		-	2	4	2
9	SET/CS/BT/S709	Industrial Training Seminar	-	-	1	2	1
otal	The second second	· New York	15	5	5	30	20

	S. No.	Code		Course Title	
Elective I	1	SET/CS/BT/E721		Security Architecture & Operating System Security	
Dictive 1	2	SET/CS/BT/E722	*	Neural Network	
	3	SET/CS/BT/E723		Real Time System	

	S. No.	Code	Course Title	
Elective II	1	SET/CS/BT/E731	Cloud Computing	
Dicetive II	2	SET/CS/BT/E732	Distributed Computing	
	3	SET/CS/BT/E733	Digital Image Processing	

Semester VIII

S. No.	Code	Course Title	L	T	P	Contact Hrs./Wee	Credits
1		UNIX Shell Programming	3	1	-	4	3
2	SET/CS/BT/C802	Cyber Security and Ethical Hacking	3	1	-	4	3
3		Elective III	3	1	T-	4	3
4		Elective IV	3	1	1-	4	3
5	SET/CS/BT/C805	B	-		1	2	1
6	SET/CS/BT/C806	Cyber Security and Ethical Hacking lab	-	-	i	2	1
7	SET/CS/BT/C807	Project and Dissertation			6	12	6
Total			12	4	8	32	20

	S. No.	Code	Course Title	
	1	SET/CS/BT/E821	Mobile Application Development	
Elective III	2	SET/CS/BT/E822	Platform Technology	
Siccitive III	3	SET/CS/BT/E823	Bioinformatics	
1	4	SET/CS/BT/E824	Natural Language Processing	

	S. No.	Code	Course Title	
- [1	SET/CS/BT/E831	Multimedia Technology	
Elective IV	2	SET/CS/BT/E832	Machine Learning	
	3	SET/CS/BT/E833	Optical Network	
H	4	SET/CS/BT/E834	Big Data Analytics	

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B.O.S. on 03/10/2018

Module Name	Content	No. of Hrs.		
	Project – I includes following assignments.	3x16		
	Survey and study of published literature on the assigned topic.	3		
E.L.	Select and define an appropriate problem.			
	Working out a preliminary approach to the Problem relating to the assigned topic.			
	Conducting Preliminary Analysis/ Modeling/ Experiment/ Simulation/ Experiment/ Design/ Feasibility.			
	Preparing a Written Report on the Study conducted for presentation to the Department.			
	Final Seminar, as oral Presentation before a Departmental Committee.			
\$43.5 55	Total No. of Hours	48		

Module Name	INDUSTRIAL TRAINING SEMINAR (SET/CS/BT/S709)	
NO. PROPERTY AND ADDRESS OF THE PARTY AND ADDR	Content	No. of Hrs.
a	tudent shall prepare a detailed report on her/his industrial training and deliver seminar of 30 minutes.	- 1

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Department of Computer Science & Engineering School of Engineering and Technology H. N. B. Garhwal University, Srinagar

General Meeting of Board of Studies

VENUE

Department of Computer Science & Engineering, Chauras

Campus, H.N.B. Garhwal University, Srinagar.

DATE

03rd October, 2018

TIME

11:00 A.M.

AGENDA

Minutes of the Meeting of the Board of Studies

Meeting of the Board of Studies of Department of Computer Science & Engineering was held on 03.10.2018 at 11.00 A.M. in the office of Head, Department of Computer Science & Engineering, HNB Garhwal University, Srinagar (Garhwal).

The meeting was attended by the following:-

1. Prof. M.M.S. Rauthan

Chairman

Head, Department of Computer Science & Engineering

HNB Garhwal University, Srinagar

2. Prof. D S. Negi, Head

Depart on tof Mathematics,

HNB Garhwal University, Srinagar

3. Prof. S.C.Bhatt,

Department of Physics.

HNB Garhwal University, Srinagar

4. Dr. Y.P.Raiwani

Department of Computer Science & Engineering

HNB Garhwal University, Srinagar

5. Dr. M.P. Thapliyal

Associate Professor

Department of Computer Science & Engineering

HNB Garhwal University, Srinagar

6. Dr. Narender Kumar

Assistant Professor

Department of Computer Science & Engineering

HNB Garhwal University, Srinagar

The following members could not attend the meeting:-

1. Prof. V.K. Sharma

Department of Computer Science

Gurukul Kangri University, Haridwar

Cognate Member

Cognate Member

Member

Member

(Special Invitee)

Member

(Special Invitee)

Expert

The Chairman welcome all the members of the Committee and items of the agenda were discussed

one by one, by the committee

Approval of modified syllabi of B. Tech (CSE), M. Tech (CSE) and Pre- Ph. D. Item no. 1 Courses.

All the members of the Committee were agreed for the modification made in the **Resolution:** syllabi. The suggestions and modification by the members were incorporated in the syllabus

Approval of changes in evaluation schemes of final semesters of MCA, BCA, B.Sc. Item no. 2: (IT). M.Sc. (IT), B.Sc. (CS) and M.Sc. (CS) as per university norms.

All the members of the Committee were agreed for the changes made in the **Resolution:** evaluation schemes of final semester of MCA, BCA, B.Sc. (IT), M.Sc. (IT), B.Sc.(CS) and M.Sc.(CS) as per following tables:

MCA VI Semester

Subject Code	Subject	Instructional Hrs/Week			Marks	Credit		
		L T P	P	ESA	CA	Sub Total		
Practical								
SET/CSE/MCA/PR61	Thesis/Project Work	-	3	18	60	40	100	15
Elective IX							,	
SET/CSE/MCA/E601	Seminar	-	-	-	60	40	100	3
SET/CSE/MCA/E602	Group Discussion							
Tot	al	-	3	18	120	80	200	18

ESA : End Semester Assessment CA

: Continuous Assessment

Sub. Total : Subject Total

BCA VI Semester

S. No.	Course No.	Subject	Evaluat	ion –	Sche	me					Credit	
			Period			Sessio	nal		Examir	ation		
		L	T	P	TA	CT	TOT	ESE	Sub. Total			
Theory							•					
1.	SET/CSE/BCA/DSE4	DSE4A	4	1	-	10	20	30	70	100	5	
2.	SET/CSE/BCA/DSE4	DSE5A	4	1	-	10	20	30	70	100	5	
3.	SET/CSE/BCA/SEC4	SEC 4A	2	-	-	10	20	30	70	100	2	
Practical		•				1			1,0	100		
1.	SET/CSE/BCA/EP61	DSE4A Lab	-	_	3	30	Τ-	30	70	100	2	
2.	SET/CSE/BCA/EP62	Project	2	2	6	30	-	30	70			
	Total		12	4	9	90	60	150	350	100 500	20	

B.Sc. (IT) VI Semester

S.No	Course No.	Subject	Evalu	uation -	- Schen	ne					Credit
			Perio	d		Session	al		Examin	ation	- Crean
			L	T	P	TA	CT	TOT	ESE	Sub. Total	
Theory	у				•					Total	
1.	SET/CSE/BIT/DSE4	DSE4A	4	1	-	10	20	30	70	100	
2.	SET/CSE/BIT/DSE5	DSE5A	4	1	-	10	20				3
3.	SET/CSE/BIT/SEC4	SEC4A	2	-	-	10	20	30	70	100	3
	cal / Tutorial					10	20	30	70	100	2
1.	SET/CSE/BIT/CP61	DSE4A Lab	-	-	3	30		7 - 20			
2.	SET/CSE/BIT/CP62	Project	2	2	6	30	-	30	70	100	2
2.	BETTESE/BITTET 02	Total	12	1	-		-	30	70	100	6
7		10141	12	4	9	90	60	150	350	500	20
Total	Credits							•			120

M.Sc. (IT) IV Semester

,No Course No.	Subject	Evalua Period	tion – S	cheme					Consti
heory		Y m		Sessi	onal		Exam	ination	Credit
		L	P	TA	СТ	ТОТ	ESE	Sub. Total	
SET/CSE/MIT/E3	Elective III	3 -	_						
SET/CSE/MIT/E4	Elective IV	3 -	-	10	30	40	60	100	1
		3 -	-	10	30	40	60	100	3
SET/CSE/MIT/EP41	Elective III							100	3
SET/CSE/MIT/PR41	Project	-	3	10	30	40	60	100	
	Total	- 2	12	10	30	40	60	100	2
SET/CSE/MIT/SS41	Self-Study	6 2	15	40	120	160	240	400	10
	1 Jen-Study	2 1	-	-	-	-		400	18
								-	3

B.Sc. (CS) VI Semester

S.No Course No			` /		CIIICSTC	-				
Course No.	Subject	Evalua	ntion — S	Scheme	;					
		Period	_		Sessio	nal		Exami	notic-	Credit
heory		L	T	P	TA	CT	TOT	ESE	Sub.	-
SET/CSE/BCS/DSE4	7.00								Total	
SET/CSE/BCS/DSF5	DSE4A DSE5A	4	l	T-	10	20	30	70		
SET/CSE/BCS/SEC4	SEC4A	4	1	-	10	20	30	70	100	5
ractical / Tutorial	J DECTA	2		-	10	20	30	70	100	5
OLI/CSE/BCS/CP61	DSE4A Lab	_		Τ				70	100	2
SET/CSE/BCS/CP62	Project	2	2	6	30	-	30	70	100	2
	Total	12	4	9	30 90	-	30	70	100	6
				1	70	60	150	350	500	20

M.Sc. (CS) IV Semester

. No Course	140.	Subject	Eva Peri	luatio	on – S	cheme					C
Theory 1. SET/CSE	E/MCS/E3		L	T	P	Sessio TA	onal CT	TOT	Exami ESE	nation Sub. Total	Credit
SET/CSE	E/MCS/E4	Elective IV	3	-	-	10	30	40	60	100	3
. SET/CSE	MCS/EP41 MCS/PR41	Elective III	-	-	3	40	30	40	60	100	3
	/MCS/SS41	Project Total	6	2 2	12 15	40 100	- 60	40 40 160	60	100 100	10
Item no. 3	,	Self-Study	2	1	-	-	-	-	240	400	18

Item no. 3: Approval of allotment of Supervisors for Research Scholar

Resolution: The research scholar of computer science and application session 2017-18 has for them was done as per the following table:

S.No.	Name of the Research Scholar	
1.	Mr. Varun Barthwal	Name of Supervisor
	Mr. Shailesh Singh Panwar	Prof. M. M. S. Rauthan
3.	Ms. Khushbu Verma	Dr. Y.P. Raiwani
		Dr. Narendra Kumar Rawa

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Discussion on leave application of Ms. Neelam Panwar (Research Scholar, Item No. 4: Enrollment no. G151901, Registration no. ECS -16187, Registration Date 09.07.2015).

Resolution: Ms. Neelam Panwar has completed minimum required period of 24 months in the campus after Pre-Ph.D. course. She is eligible to carry her research work off campus according to Ph.D. ordinance 2012 clause 9(A). So all the members of the Committee were agreed to accept her request for leave in anticipation of the approval of Hon'ble Vice- Chancellor.

Approval for Admission to MCA IInd year (Lateral Entry) against vacancies of first Item No. 5: year from academic session 2019-20.

Resolution: As per AICTE F.NO. AICTE/AB/NR/MCA-L.E./2016 dated 14.10.2016, all the members of the committee are agreed for MCA second year Lateral Entry with following conditions

> "Provided that Students who have completed Bachelor's Degree of minimum 03 years duration in BCA, B.Sc. (Information Technology)B.Sc. (Computer Science) with Mathematics as a course at 10+2 level or at Graduate level shall be eligible for admission to second year MCA courses up to a maximum of 20% of sanctioned intake (30% for Institutions in Andaman, Nicobar, Lakshadweep, Daman and Diu) plus unfilled vacancies of 1styear which shall be over and above, supernumerary of the sanctioned intake."

Item No. 6: Approval of entrance test syllabi of MCA 2 year (Lateral Entry) and 3 year -Programme, M. Tech and PhD. Entrance examination.

All the members of the Committee discussed the syllabi and approved the syllabi. of Resolution: entrance test.

(Prof. M.M.S. Rauthan) Chairman

(Prof. D.S. Negi) Cognate Member (Prof. S. C. Bhatt) Cognate Member

(Dr. Y. P. Raiy/ani) Member

(Dr. M. P. Thapliyal)

Member

(Dr. Narender Kumar) Member

Proceedings of the BoS of the Electronics and Communication Engineering (Meeting held on 05-04-2018)

As per university notification No.:. Acad. /2018/.7.1....., the Board of Studies (BoS) meeting was held in the office of the Head, Electronics and Communication Engineering Department at the Chauras campus of the university. Following members were present-

1. Prof. Y.Singh, ECE Dept., GBPIET, Pauri Garhwal	Member
2. Dr. P.K.Pal, ECE Dept., NIT Srinagar Garhwal	Member
3. Prof. S. C. Bhatt, Physics Dept., HNB Garhwal University	Member
4.Prof.Y.S.Farswan, Dept. of History and Archaeology	Member
5.Mr. A.S.Bahuguna, ECE Dept., HNB Garhwal University	Member
6. Mr. Kuldip Kumar, ECE Dept., HNB Garhwal University	Convener

The following agenda were discussed, elaborated and worked out and resolved as stated.

Agenda item No. 1. To identify the Experts for the Selection Committee(s) for the Electronics and Communication Engineering Department.

Resolution: The identified experts for Selection Committee(s) for the recruitment of Electronics and Communication Engineering Department teachers are listed in Enclosure-1 (Envelop-1).

Agenda item No. 2. To list the names of paper setters/ practical examiners for the examinations of the courses of the department.

Resolution: The names of the paper setters/ practical examiners for the examination of the courses of the department are as listed in **Enclosure-2** (Envelop-2).

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Agenda item No. 3. To update the syllabus for B. Tech. (Electronics and Communication Engineering) course.

Resolution: Syllabus for B. Tech. (Electronics and Communication Engineering) course was discussed deliberately and Updated as Enclosure-3.

The meeting was concluded with vote of thanks to the chair.

The item wise resolutions are being recommended for the kind consideration and approval of the School Board/Academics Council.

(Prof. Y.Singh)

(Prof. S.C.Bhatt)

(Dr. P.K.Pal)

(Frof. Y.S. Farswan)

(A.S.Bahuguna)

(Kuldip Kumar)

Curriculum and Syllabus

B. TECH.

Electronics and Communication Engineering

(Applicable for 2018-19 batch and onwards)



Department of Electronics and Communication Engineering
School of Engineering and Technology,
H. N. B. Garhwal (Central) University,
Srinagar Garhwal, Uttarakhand- 246174

Semester VI

S.	Code	Course Title	L	T	P	Contact	Credits
No.						Hrs./Week	
1	SET/EC/BT/C601	Digital Signal Processing	3	1	-	4	3
2	SET/EC/BT/C602	Data Communication and Networking	3	1	-	4	3
3	SET/EC/BT/C603	Antenna and Wave Propagation	3	1	-	4	3
4	SET/EC/BT/C604	Telecommunication Switching	3	1	-	4	3
5		Program Elective-II	3	1	-	4	3
6	SET/EC/BT/C606	Digital Signal Processing Lab	-	-	2	2	1
7	SET/EC/BT/C607	Mini Project	-	-	2	2	1
8	SET/EC/BT/C608	Seminar	-	-	2	2	1
9	SET/SH/BT/A609	* Biology	3	1		4	3
		Total	18	6	6	30	21

^{*}Applied Sciences and Humanities courses

List of Program Elective:

S.No.	Code	Course Title
1	SET/EC/BT/E611	CMOS Analog IC Design
2	SET/EC/BT/E612	Information Theory and Coding
3	SET/EC/BT/E613	Bio-medical Electronics

Semester VII

S. No.	Code	Course Title	L	Т	P	Contact Hrs./Week	Credits
1	SET/EC/BT/C701	Advance Communication Systems	3	1	-	4	3
2		Program Elective-III	3	1	-	4	3
3		Program Elective-IV	3	1	-	4	3
4		#OE-I	3	1	-	4	3
5	SET/EC/BT/C705	Advance Communication Lab.	-	-	2	2	1
6	SET/EC/BT/C706	Industrial Training Seminar	-	-	2	2	1
7	SET/EC/BT/C707	Project Stage-I	-	-	6	6	3
8	SET/HS/BT/H710	*Principles of Management	3	1	-	4	3
		Total	15	5	10	30	20

^{*} Humanities and Social Sciences including Management courses.

List of Program Elective:

S.No.	Code	Course Title
1.	SET/EC/BT/E711	Fiber Optic Communication
2.	SET/EC/BT/E712	Embedded Systems
3.	SET/EC/BT/E713	Adaptive Signal Processing
4	SET/EC/BT/E714	Wireless Sensor Networks
5	SET/EC/BT/E715	High Speed Electronics
6	SET/EC/BT/E716	Error Correcting Codes

^{*}OE: Courses offered by any other department of School of Engineering and Technology

भारत संचार निगम लिमिटेड **BHARAT SANCHAR NIGAM LIMITED** (भारत सरकार का उपक्रम)

(A Govt. of India Enterprise)



कार्यालय (Office) ऑपरेशन हेड दूरसंचार, श्रीनगर गढवाल उत्तराखण्ड - 246174 Operation Head Telecom Srinagar Garhwal (Uttarakhand) - 246174

पंजीकीण संख्या (Regd. No):- VT/20

CERTIFICATE OF BASIC LEVEL VOCATIONAL TRAINING IN TELECOM

Certified that Sk./Smt/Ku ABHISHEK GHILDIYAL student of HNB Garhwal (A Central) University Szinagan Garhwal Uttarakhand Pursuing B. Tech. [E.SCE] IV Sern. Year/Semester has successfully completed Vocational Training of .94. Weeks, in Basic Telecom with effect from .15-06-2022. To. 13-07-2022...at Srinagar (gwl) SSA BSNL. His/Her Performance during the training has been. Excellent. Bharat Sanckar Nigam Limited wiskes for their bright future.

Place: Srinagar Gwl

Prepared / Checked By :- www Next

Sringgar Gwith कार्याञ्चल प्रवन्यक दूर संचार जिला क्रीनगर (गढ़वाल) 246174

भारत संचार निगम लिमिटेड BHARAT SANCHAR NIGAM LIMITED (भारत सरकार का उपक्रम) (A Govt of India Enterprise)



कार्यालय (Office) ऑपरेशन हेड दूरसचार, श्रीनगर गदवाल उत्तराखण्ड - 246174 Operation Head Telecom Srinagar Garhwal (Uttarakhand) - 246174

पंजीकीण संख्या (Regd. No):- VT/2022-23/03

CERTIFICATE OF BASIC LEVEL VOCATIONAL TRAINING IN TELECOM

Certified that Sh./Smt/Ku KM. DIVYA RATURI student of H.N.B. Garhard (A. Central) University Sringgar Uttarakhand 246174 Pursuing Training of 94. Weeks, in Basic Telecom with effect from 13-06-2022. To. 11-07-2022. at Srinagar (gwl) SSA BSNL. His/Her Perharmance during the training has been ... Excellent... Bharat Sanchar Nigam Limited wiskes for their bright buture.

Place: Srinagar Gwl

Dated: 12th July 2022 Prepared / Checked By :-

of a space to

कीनगर (गवयात) 246174

BHARAT SANCHAR NIGAM LIMITED भारत संचार निगम लिमिटेड भारत सरकार का उपक्रम (A Govt. of India Enterprise)



ऑपरेशन हेड दूरसंचार, श्रीनगर गढ़वाल Operation Head Telecom (Uttarakhand) - 246174 उत्तराखण्ड - 246174 Srinagar Garhwal कार्यालय (Office)

पंजीकीण संख्या (Regd. No):- VT/2011-22/08

CERTIFICATE OF BASIC LEVEL VOCATIONAL TRAINING IN TELECOM

Certified that Sk-1Smt/Ku HIMBNSHI GAUTAM student

of H.N.B. Garhusal C.A. Central). University. Sringer. (Gust). Uttarekhand. Pursuing

Training of .04. Weeks, in Basic Telecom with effect from 15.06-2022. To. 13-07-2022. at

Srinagar (gwl) SSA BSKL. His/Her Performance during the training has been... Excellent

Bharat Sanckar Nigam Limited wishes for their bright future.

Place: Srinagar Gwl

Prepared / Checked By :- June 100

Secret





प्रमाण पत्र / CERTFICATE

प्रमाणित किया जाता है कि श्री/सुश्री पुपालन डामार सुपुत्री श्री मद्न डामार
जो कि एच एन बी जी धीन श्रीन्मार गहवाल में ई सी ई
के छात्र/छात्रा हैं, ने इस संस्था के विभिन्न विभागों में 27-06-2022 से 18-07-2022 तक
— का अपना अवैतनिक प्रशिक्षण पूरा कर लिया है।
प्रशिक्षण के दौरान इनकी अवैतनिक प्रशिक्षणार्थी संख्या 7551/33. थी। वह एक निष्ठावान, अनुशासित एव
मेहनती विद्यार्थी है और प्रशिक्षण के दौरान इनका निष्पादन उत्कृष्ट
This is to certify that Mr./Ms. Prafull Kumar SIO DIO Sh. Madan Kumar
who is a student of HNBGIU Sri nagar Garhudin ECE
has undergone Unpaid Training in the various departments of this organization
from 27-06-2022 to 18-07-2022 for period of
During Training he/she was allotted Unpaid Trainee No
is Honest, Obedient and Hard working student and his/ her Performance during Training
was Excellent
दिनांक : कृते भीरत इलेक्ट्रॉनिक्स लिमिटेड
दिनांक : कृते भोरत इलेक्ट्रॉनिक्स लिमटड
Date: 18 - 07- 2022- For Bharat Flectronics Limited a. सहायक अभियता (मा.स.वि) Sr Astt. Engineer (HRD) भारत इलेक्ट्रॉनिक्स लिमिटेड, प्रचकुला Rharat Flectronics Limited a. सहायक अभियता (मा.स.वि) Sr Astt. Engineer (HRD)





प्रमाण पत्र /CERTFICATE

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क्लीत किय बता है के बे/वृक्षे उत्तान कुमार जीना	ग्राम ने प्रवन कुमार जान
* 1 TIT DA 61 1 711-0 34 -1712 diga	IM . 9.41.7.
हे जात / जाता है, ने इस संस्था के विभिन्न विभागों ने 13-06-202	2 + 12-07- 2022 11
का अपना अवैतानिक प्रशिक्षण पूरा कर लिया है।	
प्रतिकान के दोशन इनकी अवैदानिक प्रतिकाराची संख्या 75 47/22	ची। वह एक निकासन् अनुसासित एवं
मेहनती विद्याची है और प्रतिवान के दौरान इनका निष्पादन उँट्युकेट	
This is to certify that Mr./Ms Rattan Kumar Jain se	DOOS Rawan Kumar Jain
who is a student of HNBGU Sringgar Garhin	In ECE
has undergone Unpaid Training in the various de	nartments of this organization
has undergone Unpaid Training in the various de	
from 13-06-2022 to 12-07-2022 for pe	riod of
	7547/2 1 He/She
During Training he/she was allotted Unpaid Trainee No	
is Honest, Obedient and Hard working student and his/	her Performance during Training
was Excellent	
	(2) ou 12/3/22
रिनांक :	कृते भारत इलेक्ट्रॉनिक्स लिमिटेड For Bharat Electronics Limited
Date: 12-07-20-22.	राम प्रामार मेनी /Ram Kumar Saini यः शहायक अभियामा (मा.स.वि.)
	Sr Astt. Engineer (HRD)
	sura saluctifiam falacis, usagen Bharat Electronics Ltd. Panchkula



OIL AND NATURAL GAS CORPORATION LTD CBM ASSET

1st Floor HSCL Building, Near Naya More, Bokaro, (Jharkhand) - 827001

.....a student of HNB Garhoat University

He/She has successfully complete his/her Project Work on ... Nationark De sign ... Routing ...

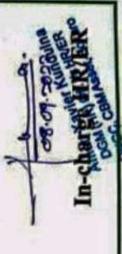
4 Security indiscipline of Electronics & Communication Engg. during

the Training, he/she-took ken interest in the assigned work. We wish him/herall success in his / her academic

endeavours and life.

Date: 08. 09.2022

Place: Bokaro





Abhishek Kumar

from Hemwati Nandan Bahuguna Garhwal University (a central University) has successfully completed a 6-week online training on **VLSI Design**. The training consisted of Introduction to VLSI, HDL Coding Concepts, Combinational Circuits, Sequential Circuit Design, Finite State Machines, System Design using FPGA, and Case Studies & Final Project modules.

In the final assessment, Abhishek scored 84% marks. We wish Abhishek all the best for future endeavours.

Sarvesh Agarwal

FOUNDER & CEO, INTERNSHALA

Date of certification: 2022-07-16 Certificate no.: 91878044-7009-D640-B331-E92618EB7424

Serial No : PI/22/2752





CERTIFICATE OF COMPLETION

This internship certificate for brilliant and consistent high standards of workmanship signed this day by the duly authorized officers is proudly presented to

MR/MS. ABHISHEK PANDEY

For the successful completion of internship

EMBEDDED

under Pie Infocomm Private Limited from 20th JUNE 2022 to 5th AUGUST 2022. It lead to the Completion of Project titled as "FINGERPRINT DOOR UNLOCK SYSTEM"



BHARAT SANCHAR NIGAM LIMITED भारत संचार निगम लिमिटेड भारत सरकार का उपक्रम

(A Govt of India Enterprise

Consecting Indi BSNI

ऑपरेशन हेड दूरसचार, श्रीनगर गढ़वाल Operation Head Telecom (Uttarakhand) - 246174 उत्तराखण्ड - 246174 Srinagar Garhwal कायोलय (Office)

पंजीकीण संख्या (Regd. No):- VT/2021-22 /o8

CERTIFICATE OF BASIC LEVEL VOCATIONAL TRAINING IN TELECOM

Bharat Sanchar Nigam Limited wishes for their bright future Sninger (guel) SSA BSML. His/Her Performance during the training has been. Excellent Training of 9.4. Weeks, in Basic Telecom with effect from 15-06-2022. To 13-07-2022 at of H.N.B. Garhuse (A Central) University ... Szinagar Garhusel Ultarakhand Puruning

Place: Srinagar Gwl



Assistant General Manager शीनगर (गढवाल) 246174



NATIONAL INSTITUTE OF ELECTRONICS & INFORMATION TECHNOLOGY

(Ministry of Electronics & Information Technology, Government of India)

An ISO 9001:2015 Certified Organization

HARIDWAR CENTRE

CERTIFICATE

This is to certify that

Mr. Amgoth Balaji S/o Mr. Lingya Nayak

has successfully completed 6 weeks (60 hours) Summer Training

programme on

Internet of Things (IoT) using Arduino

conducted by this Centre in online mode

from 29/06/2022 to 16/08/2022.

Signature valid

Digitally signed by SANYAM RATHOR Date: 2022.08 24 15:05:59

Joint Director (Tech)

Signature yalid

Digitally signed by ANURAG NUMAR Date: 2022:09.25 11:36:47 IST

Director-in-charge

e-Certificate No : HDO03173

भारत यंचार निगम निमित्रेट BHARAT SANCHAR NIGAM LIMITED (भारत सरकार का उपक्रम)

(A Govt of India Enterprise)



कार्यालय (Office) ऑपरेशन हेड दूरसचार, श्रीनगर गढवाल उत्तराखण्ड - २४६१७४ Operation Head Telecom Srinagar Garhwal (Uttarakhand) - 246174

पंजीकीण संख्या (Regd. No):- VT/2021 | 22/

CERTIFICATE OF BASIC LEVEL VOCATIONAL TRAINING IN TELECOM

Certified that Sk./Smt/Ku AMIT KUMAR .studout. of H.N.B. Garhual (A Central) University Solvagar Garhual UKD Pursuing B.T.c.c.h. [E.C.E.] III Sem. Year Semester has successfully completed Vocational Training of 94. Weeks, in Basic Telecom with effect from 30-08-2022. To. 27-09-2022 at Srinagar (gwl) SSA BSNL. His/Her Performance during the training has been ... Excellent Bharat Sanckar Nigam Limited wiskes for their bright future.

Place: Srinagar Gwl

Dated: 30/09/2022

Prepared / Checked By :- ...



यूजेवीएन लिमिटेड

(चत्त्रसंखन्ड सरकार का चप्रवम)

UJVN LIMITED

(A Government of Uttarakhand Enterprise)

ভার্তনের, ভটিয়ানী ভটিবনা, ভাসুম্মণ एवं चरपादन, ढक्शनी, देहरादून—248147 दूरमात्र स0 01360258263, फेक्स— 01360258706 Office of the Executive Engineer, Maintenance & Generation, Dhakrani, Dehradun-248147, Phone 01360258263 and Fax- 01360258706 CIN No.U40101UR2001SGC025866 ISO 9001,14001 Certified

TO WHOM IT MAY CONCERN

Certified that Mr. Ayush Badoni, (Electronics. Engi.) Student of B.Tech, School of Engineering & technology, Srinagar has completed his Summer training at Dhakrani Power Station under Executive Engineer (Maintenance & Generation), Dhakrani from 27.06.2022 to 24.07.2022. During above period his conduct was found very good.

We wish him all success in his life.

(Sukhjeet Singh)

Executive Engineer
EXECUTIVE ENGINEER
MAINTENANCE & GENERATION
UJVN LIMITED
DHAKRANI POWER STATION
DHAKRANI (DEHRADUN)

भारत संचार निगम लिमिटेड BHARAT SANCHAR NIGAM LIMITED (भारत सरकार का उपक्रम) . (A Govt. of India Enterprise)



कार्यालय (Office) ऑपरेशन हेड दूरसंचार, श्रीनगर गढवाल उत्तराखण्ड – 246174 Operation Head Telecom Srinagar Garhwal (Uttarakhand) - 246174

पंजीकीण संख्या (Regd. No):- VT/2021-2 2//3

CERTIFICATE OF BASIC LEVEL VOCATIONAL TRAINING IN TELECOM

Certified that Sh./Smt/Ku.

DEEPAK SINGH MAURYA.

of M.N.B. Garhwaf L. A. Central J. University. Singar Grawaf Utterakhand Pursuing

B. Tech. L.E. B. C.E. J. Sem. Year/Semester has successfully completed Vocational

Training of ...4. Weeks, in Basic Telecom with effect from 20:06-2022. To .18-07-2022.

Srinagar (gwl) SSA BSNL. His/Her Performance during the training has been. Excellent

Bharat Sanchar Nigam Limited wishes for their bright buture.

Place : Srinagar Gwl Dated : 19-07-2022

Prepared / Checked By :-

Assistant Seneral Manag

कार्या०महा प्रबन्धक दूर संचार जिला श्रीनगर (गढ़वाल) 246174



Govind Chauhan

from Hemvati Nandan Bahuguna Garhwal University (Central University), Srinagar Uttarakhand has successfully completed a 6-week online training on **VLSI Design**. The training consisted of Introduction to VLSI, HDL Coding Concepts, Combinational Circuits, Sequential Circuit Design, Finite State Machines, System Design using FPGA, and Case Studies & Final Project modules.

We wish Govind all the best for future endeavours.

Sarvesh Agarwal

FOUNDER & CEO, INTERNSHALA





भारत इलेक्ट्रॉनिक्स लिमिटेड, पचक्ला Bharat Eleatronies Etd , Panghkula

प्रमाण पत्र / CERTFICATE

प्रमाणित किया जाता है कि श्री/सुश्री हिंपल दिन दियाल बीरकार सुपुत्र/सुपुत्री श्री दिनद्याल बीरकार
जीक हमा हन बी.जी योन, भीनगर गढवाल में इ.स.इ.
के छात्र / छात्रा हैं, ने इस संस्था के विभिन्न विभागों में 13-06-2022 से 12-07-2022, तक
का अपना अवैतनिक प्रशिक्षण पूरा कर लिया है।
प्रशिक्षण के दौरान इनकी अवैतनिक प्रशिक्षणार्थी संख्याथी। वह एक निष्ठावान, अनुशासित एवं
मेहनती विद्यार्थी है और प्रशिक्षण के दौरान इनका निष्पादन उत्यादन
This is to certify that Mr./Ms. Hax shall Dindayal so DIO Sh. Dindayal Box Kar who is a student of HNB Gr. U-Sti Nagar Garhwalin ECE
has undergone Unpaid Training in the various departments of this organization
from 13-06-2032 to 12-07-2022 for period of
During Training he/she was allotted Unpaid Trainee No7546/22
is Honest, Obedient and Hard working student and his/ her Performance during Training
was Excellent
दिनांक : Date : 12-07-9099 The control of the co
दिनांक : कृते भारत इलेक्ट्रॉनिक्स लिमिटेड
Date: 12-07- 2022. For Bharat Electronics Limited सम कुमार सेनी / Ram Kumar Saini व. सहायक अभियता (मा.स.वि) Sr Astt. Engineer (HRD)



University of Colorado Boulder

COURSE CERTIFICATE

26 Dec. 2022

HIRAN KUMAR BAMMIDI

has successfully completed

Embedded Software and Hardware Architecture

an online non-credit course authorized by University of Colorado Boulder and offered through Coursera



Alex Fosdick Instructor Electrical, Computer, and Energy Engineering

https://coursera.org/verify/TNK5UNVUMGQE

Coursera has confirmed the identity of this individual and their participation in the course.

भारत संचार निगम लिमिटेड BHARAT SANCHAR NIGAM LIMITED (भारत सरकार का उपक्रम)

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कार्यालय (Office) ऑपरेशन हेड दूरसंचार, श्रीनगर गढ़वाल उत्तराखण्ड - २४६१७४ **Operation Head Telecom** Srinagar Garhwal (Uttarakhand) - 246174

पंजीकीण संख्या (Regd. No):- VT/2021-22

CERTIFICATE OF BASIC LEVEL VOCATIONAL TRAINING IN TELECOM

KANCHAN RANA student Certified that Str. (Smt/Ku. of H.N.B. Garhood [A Central] University Sringgar Garhood Utterakhand Pursuing B. Tech. [E. S.C.E.] IV. Sem. Year/Semester has successfully completed Vocational Training of .4... Weeks, in Basic Telecom with effect from .20-06-2022. To .18-97-2022 at Srinagar (gwl) SSA BSNL. His/Her Performance during the training has been ... Excellent. Bharat Sanchar Nigam Limited wishes for their bright future.

Place: Srinagar Gwl

Prepared / Checked By :- Ween No.

General Manager

Sringgar (Gwl)

कार्या०महा प्रबन्धक दूर संचार जिला श्रीनगर (गढवाल) 246174



Munna Kumar

from Hemvati Nandan Bahuguna Garhwal (Central) University has successfully completed a 6-week online training on **VLSI Design**. The training consisted of Introduction to VLSI, HDL Coding Concepts, Combinational Circuits, Sequential Circuit Design, Finite State Machines, System Design using FPGA, and Case Studies & Final Project modules.

In the final assessment, Munna scored 86% marks.

We wish Munna all the best for future endeavours.

Sarvesh Agarwal

FOUNDER & CEO, INTERNSHALA

भारत संचार निगम लिमिटेड BHARAT SANCHAR NIGAM LIMITED (भारत सरकार का उपक्रम)

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कार्यालय (Office) ऑपरेशन हेड दूरसंचार, श्रीनगर गढ़वाल उत्तराखण्ड - 246174 **Operation Head Telecom** Srinagar Garhwal (Uttarakhand) - 246174

पंजीकीण संख्या (Regd. No):- VT/2021-22/18

CERTIFICATE OF BASIC LEVEL VOCATIONAL TRAINING IN TELECOM

Certified that Sh. 1 Smit Hu.	PRADHUMAN NATH RAHAL	student
of H.N.B. Garhwal [AC	entral] University Solvagar Garhwa	e. Uttomkhand. Pursuing
Training of .9.4Weeks, in	Basic Telecom with effect from 20-06-2022	To.18-07-2022 at
Srinagar (gwl) SSA BSNI	. His/Her Performance during the training has l	been Excellent
Bharat Sanchar Nigam Lim	ited wishes for their bright future.	1

Place: Srinagar Gwl
Dated: 22-07-2022
Prepared / Checked By:- draw Negh

Assistant General Manager Smagar (GWL)

श्र्यां अनगर प्रबन्धक दूर संचार जिला क्षेनगर (गढ़वाल) 246174



Pratham Verma

from Hemvati Nandan Bahuguna Garhwal University, Srinagar (Garhwal), Uttarakhand-246174 has successfully completed a 6-week online training on **MATLAB**. The training consisted of Introduction, Foundations, Mathematics, Functions, Plotting, Programming, Case Studies, and Final Project modules.

We wish Pratham all the best for future endeavours.

Sarvesh Agarwal

FOUNDER & CEO, INTERNSHALA



Prerna Negi

from Hemvati Nandan Bahuguna Garhwal University has successfully completed a 6-week online training on **Arduino**. The training consisted of Introduction, Basics of Arduino programming, Basics of Electronics, Interfacing basic IO Devices, Mini Projects, Case Studies, and Final Project modules.

We wish Prerna all the best for future endeavours.

Sarvesh Agarwal

FOUNDER & CEO, INTERNSHALA



Raghvender Singh

from Hemvati nandan bahuguna garhwal (central) university, Srinagar, garhwal uttarakhand has successfully completed a 6-week online training on **VLSI Design**. The training consisted of Introduction to VLSI, HDL Coding Concepts, Combinational Circuits, Sequential Circuit Design, Finite State Machines, System Design using FPGA, and Case Studies & Final Project modules.

Raghvender is a top performer in the training. We wish Raghvender all the best for future endeavours.

Sarvesh Agarwal

FOUNDER & CEO, INTERNSHALA

Date of certification: 2022-07-18 Certificate no.: 7A29C1BA-04AE-29CD-B380-99E70EE7E0F6



Rajkumar Jataboina

from Hemvati Nandan Bahuguna Garhwal University (Central University), Srinagar Uttarakhand has successfully completed a 6-week online training on **VLSI Design**. The training consisted of Introduction to VLSI, HDL Coding Concepts, Combinational Circuits, Sequential Circuit Design, Finite State Machines, System Design using FPGA, and Case Studies & Final Project modules.

We wish Govind all the best for future endeavours.

Sarvesh Agarwal

FOUNDER & CEO, INTERNSHALA







Certificate Number ALTSWWB223-2022-663013

ADVANCED LEVEL TELECOM TRAINING CENTRE (ALTTC), GHAZIABAD (UNO'S ITU CENTRE OF EXCELLENCE)

APEX TRAINING INSTITUTE OF BSNL(A GOVT. OF INDIA ENTERPRISE)

A Joint Venture Of International Telecommunication Union, Geneva, UNDP And The Government Of India In 1975

CERTIFICATE

This is to Certify that Mr./Ms.

SACHIN GUPTA

STUDENT

from School of Engineering and technology, HNB Garhwal University, Srinagar, Garhwal,

has successfully completed the following Course conducted by

Bharat Sanchar Nigam Limited

Name of the Course: ONLINE INDUSTRIAL TRAINING IN TELECOM TECHNOLOGY & Networks (4 WEEKS)

with effect from	13.06.22	то	08.07.22	
at	ALTTC, (Shaziabad		
We	wish him/her all t	he best for a	bright future.	
08.07.22			fuses	` .
DATE			Dy. General Manage	er (CFA & BB)

भारत संचार निगम सिमिटेड BHARAT SANCHAR NIGAM LIMITED (भारत सरकार का उपक्रम)



कार्यालय (Office) ऑगरेशन वेड पुरसवार, शीनगर गढ़ताल उत्सरावाष्ट्र - 246174 Operation Head Telecom Srinagar Gartwal (Uttarakhand) - 246174

पंजीकीण संख्या (Regd. No):- VT/2021-12/08

CERTIFICATE OF BASIC LEVEL VOCATIONAL TRAINING IN TELECOM

Certified that Sk./Smt/Ka	SANDEEP SINGH	student
of HNB Garhand CA Centre	al) University Stragger Garhu	Pal. Utterakhand Pursuing
B.Tech [ERCE] VI	50m Year Semester has success!	ully completed Vocational
THE RESERVE TO SERVE THE PARTY OF THE PARTY	Telecom with effect from 15-06-202	
Srinagar (gwl) SSA BSNL. His/H	ter Perharmance during the training k	as been. Excellent
Bharat Sanckar Nigam Limited wit		1. 1

mecun

Place : Srinagar Gwl

Dated:

Prepared / Checked By :-

Assistant General Manager

Srinager (GwL)

कार्याच्यात प्रकार पूर तथार विशा क्षेत्रपुर (शहनात) 246174





CERTIFICATE

OF COMPLETION

This certificate is proudly presented to

Satyam Kumar Mishra

in acknowledgment of participation in the

Internet Of Things Course

with **Technophilia Summer Training** in association with **B-Club IIT Kharagpur** successfully completed during **May & June 2022**

Mr. Mayank Arora Program Coordinator Technophilia Solutions Certificate Number

TP-ST-1933

Mrs. Shilpa Mehta Chief Executive Officer Technophilia Solutions



Reference Number: 0004

CERTIFICATE OF COMPLETION

5G Core - Architectures, Concepts and Call Flows

Instructors Suryabh S

Shagun Dobhal

Date: Oct. 5, 2022 Duration: 6 Weeks

This certificate verifies that **Shagun Dobhal** from Hemvati Nandan Bahuguna Garhwal University, Srinagar (Garhwal), Uttarakhand successfully completed the course **5G Core - Architectures, Concepts and Call Flows** on **05/10/2022** as taught by **Suryabh S** on Udemy. The certificate indicates the entire course was completed as validated by the student.

भारत संचार निगम सिमिटेड BHARAT SANCHAR NIGAM LIMITED (भारत सरकार का उपक्रम)



कार्यालय (Office) ऑपरेशन हेड दूरसंचार, श्रीनगर गद्धाल उत्तराखण्ड - 246174 Operation Head Telecom Srinagar Garhwal (Uttarakhand) - 246174

पंजीकीण संख्या (Regd. No):- VT/2022-23/

CERTIFICATE OF BASIC LEVEL VOCATIONAL TRAINING IN TELECOM

Bharat Sanchar Nigam Limited wishes for their bright future Srinagar (gwl) SSA BSNL. His/Her Performance during the training has been... Excellent... Training of Weeks, in Basic Telecom with effect from ... 13-96-2022. To ... 11-97-2022 at of. H.N.B. Garhwal IA Centall . Whixersity ... Spinoger Garhwal . Utterakhand . Pursuing Certified that Sk:/Smt/Ku SHIVANI JOSHI

Place : Srinagar Gwl

Prepared / Checked By :- \ Day

- Hour Nede

mechni

Assistant General Manager Srinagar Gwl

화가구(日本日本日本日) 1245 834



Certificate of Training

Subodh Saklani

from Hemvati Nandan Bahuguna Garhwal University has successfully completed a 6-week online training on **Embedded Systems**. The training consisted of Introduction, Embedded Hardware, Embedded Firmware, Firmware Development, Phases of Embedded Systems Development, Case Studies, and Final Project modules.

In the final assessment, Subodh scored 62% marks.

We wish Subodh all the best for future endeavours.

Sarvesh Agarwal

FOUNDER & CEO, INTERNSHALA

Date of certification: 2022-10-18 Certificate no.: B6F4E429-61C8-4FFD-DC2C-1CA2D63B2A20

For certificate authentication, please visit https://trainings.internshala.com/verify_certificate



Certificate of Training

Udit Uniyal

from Hemvati Nandan Bahuguna Garhwal University has successfully completed a 6-week online training on **Embedded Systems**. The training consisted of Introduction, Embedded Hardware, Embedded Firmware, Firmware Development, Phases of Embedded Systems Development, Case Studies, and Final Project modules.

We wish Udit all the best for future endeavours.

Sarvesh Agarwal

FOUNDER & CEO, INTERNSHALA

Date of certification: 2022-07-04 Certificate no.: DB485027-D85E-0659-745F-7E9F3AFCC89E

For certificate authentication, please visit https://trainings.internshala.com/verify_certificate



Virtual Door IT Services LLP

We convert difficulties into opportunities D-318, OMICRON-3, GREATER NOIDA, GBN, U. P. 201306 Phone: - +91 8750605888 | GSTIN 09AAPFV2095M1ZA Email: interact@virtualdoor.in | Web: www.virtualdoor.in

TO WHOMSOEVER IT MAY CONCERN

Date: 30-July-2022

This document is to certify that **Vaibhav Naithani** has completed his internship **Virtual Door IT Services LLP** at **Noida U.P.**, from **15th JUNE 2022 to 26th JULY 2022**.

He has worked on the project titled PIE (Prediction Insights Engine). The aim of this project was to perform a trend analysis & identify anomalous behavior. As a part of the project, he has

- performed data wrangling
- training & developing models

During the internship, Mr. Vaibhav Naithani has demonstrated a keen interest and enthusiasm to learn new skills. His performance exceeded our expectations and his dedication to their role and responsibilities was commendable. All of the tasks were completed on time and to the best of his abilities.

We wish him all the best for his career.

Date: 30-July-2022

Place: Noida

भारत संचार निगम लिमिटेड BHARAT SANCHAR NIGAM LIMITED

(भारत सरकार का उपक्रम)

(A Govt. of India Enterprise)



कार्यालय (Office) ऑपरेशन हेड दूरसंचार, श्रीनगर गढ़वाल उत्तराखण्ड - २४६१७४ Operation Head Telecom Srinagar Garhwal (Uttarakhand) - 246174

पंजीकीण संख्या (Regd. No):- VT/2021-22/08

CERTIFICATE OF BASIC LEVEL VOCATIONAL TRAINING IN TELECOM

Certified that Sh./Smt/Ku	ANOOP I	KUMAR MISHRA	student
of H.M.B. Garhwal CA Cent	ral) Universit	y Stimagar Garhu	xel. Utterskhen Pursuing
B.Tech [ESCE] VI	Sem Year/So	emester has successfull	y completed Vocational
Training of .:4Weeks, in Basic	Telecom with effec	t from 15-96-2022	Ta.13-07-2022 at
Srinagar (gwl) SSA BSNL. His/	Her Performance d	wring the training has	been Excellent
Bharat Sanckar Nigam Limited wi	ishes for their brigh	t future.	

Place: Srinagar Gwl

Dated:

Prepared / Checked By :-

Srinaga HGWHA

कार्या क्ष्महा प्रबन्धक दूर संचार जिला श्रीनगर (गढ़वाल) 246174

Proceedings of the BoS of the Instrumentation Engineering-USIC

Sindies (BoS) meeting was held in the office of the Head, Instrumentation Engineering-USIC at the Chauras campus of the university. Following members were present-

1. Dr. M. K. Panda, Electrical Engg. Dept.,

G B Pant Institute of Engineering and Technology, Pauri

-Member

2. Prof. S. C. Bhatt, Physics Dept., HNB Garhwal University

-Member

3. Prof. M. M. S. Rauthan, CSE Dept., HNB Garhwal University

-Member

4. Mr. Vishal Rohilla, Asst. Professor, Instrumentation Engg.-USIC

-Member

5. Prof. N.S. Panwar, Head, Instrumentation Engg.-USIC

-Convener

The following agenda were discussed, elaborated and worked out and resolved as stated.

Agenda item No. 1. Confirmation of the Minutes of the previous BoS meeting, held on 30-01-2016.

Resolution: Minutes of the BoS meeting, held on 30-01-2016 were confirmed.

Agenda item No. 2. Change of the name of the course at B. Tech. level from Instrumentation Engineering course to Electrical and Instrumentation Engineering (EIE).

Resolution:

To make the Instrumentation Engineering course more popular and attractive to the students seeking admission in the Engineering courses, it is decided that the name of the Instrumentation Engineering course at B. Tech. level be changed to Electrical and Instrumentation Engineering (EIE). This new nomenclature is also consistent with the nomenclature(s) recognized by the AICTE. Syllabus of the Electrical and Instrumentation Engineering (EIE) course is designed accordingly.

Agenda item No. 3. To identify the Experts for the Selection Committee(s) for the Instrumentation Engineering (IE) Department- USIC.

Resolution:

The identified experts for Selection Committee(s) for the recruitment of teachers in the Instrumentation Engineering (IE) Department and University Science Instrumentation Centre (USIC) are listed in Enclosure-1 (Envelop-1).

Agenda item No. 4. To list the names of paper setters/ practical examiners for the examinations of the courses of the department.

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Page 1 of 2

Resolution: The names of the paper setters/ practical examiners for the examination of the courses of the department are as listed in Enclosure-2 (Envelop-2).

Agenda item No. 5. To frame the Entrance Test syllabus for Lateral entry in B. Tech. Courses.

Resolution: The syllabi have been made according to the diploma, and B.Sc. (Maths, Physics) standard for Lateral entry in B. Tech. Courses. The syllabi are designed and enclosed as Enclosure-3(i) and 3(ii) respectively.

Agenda item No. 6. To design the syllabus for B. Tech. (Electrical and Instrumentation Engineering) course.

Resolution: Syllabus for B. Tech. (Electrical and Instrumentation Engineering) course was discussed deliberately and designed as Enclosure-4.

The meeting was concluded with vote of thanks to the convener.

The item wise resolutions are being recommended for the kind consideration and approval of the School Board/Academics Council.

Dr. M. K. Panda

Mr. Vishal Rohilla

Prof. S. C. Bhatt

Prof. M. M. S. Rauthan

Hon'ble Vice-chancellor

itan 10.2 12 105.04.2018

test of the approved in 1. 2011

Sant 05-04-2018

Prof. N.S. Panwar

(Convener)

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P. T.U.

Page 2 of 2

Semester VI

S.	Code	Course Title	L	T	P	Contact	Credits
No.						Hrs./Week	
1	SET/EC/BT/C601	Digital Signal Processing	3	1	•	4	3
2	SET/EI/BT/C602	PLC and Automation	3	1	1	4	3
3	SET/EI/BT/C603	Process Control	3	1	1	4	3
4		PE-02	3	1	1	4	3
5		OE-01	3	1	-	4	3
6	SET/EI/BT/C606	PLC and Automation Lab	-	-	2	2	1
7	SET/EI/BT/C607	Process Control Lab	-	1	2	2	1
8	SET/EI/BT/C608	Seminar	-	1	ı	4	1
9	SET/SH/BT/A609	Biology *	3	1	-	4	3
		Total	18	6	4	32	21

^{*} Applied Science and Humanities.

	S. No.	Code	Course Title
Professional	1	SET/EI/BT/E604 (i)	HVDC Transmission Systems
Elective 02	2	SET/EI/BT/E604 (ii)	Industrial Electrical Systems
(PE-02)	3	SET/EI/BT/E604 (iii)	Industrial Drives and Controls
	4	SET/EI/BT/E604 (iv)	Electrical distribution System

On an Election	S. No.	Code	Course Title
Open Elective	1	SET/EI/BT/E605 (i)	Power Plant Engineering
(OF 01)	2	SET/EI/BT/E605 (ii)	Optical Instrumentation
(OE-01)	3	SET/EI/BT/E605 (iii)	Analog and Digital communication

Semester VII

S.	Code	Course Title	L	T	P	Contact	Credits
No.						Hrs./Week	
1	SET/EI/BT/C701	Biomedical Instrumentation	3	1	_	4	3
2	SET/EI/BT/C702	Vacuum Instrumentation and Thin	3	1	-		3
		Film Deposition Techniques				4	
3		PE-03	3	1	-	4	3
4		OE-02	3	1	-	4	3
5		OE-03	3	1	-	4	3
6	SET/EI/BT/C706	Biomedical Instrumentation Lab	-	-	2	2	1
7	SET/EI/BT/C707	Vacuum Instrumentation and Thin	-	-	2	2	1
		Film Deposition Techniques Lab					
8	SET/EI/BT/C708	Project Preparation	-	-	2	2	1
9	SET/EI/BT/C709	Industrial Training Seminar	-	-	-	-	1
10	SET/HS/BT/H710	Principles of Management (*HSMC)	3	1	-	4	3
		Total	18	6	6	30	22

^{*} Humanities and Social Sciences including Management courses.

Duefessional	S. No.	Code	Course Title
Professional Elective 03	1	SET/EI/BT/E703 (i)	Electrical Energy Conservation & Auditing
(PE-03)	2	SET/EI/BT/E703 (ii)	Power Quality and FACTS
(FE-03)	3	SET/EI/BT/E703 (iii)	Control Systems II

	S. No.	Code	Course Title
	1	SET/EI/BT/E704 (i)	Embedded Systems
		SET/EI/BT/E705 (i)	
Open Elective	2	SET/EI/BT/E704 (ii)	Fuzzy Logic & Neural Network
02 and 03		SET/EI/BT/E705 (ii)	
(OE-02, OE-03)	3	SET/EI/BT/E704 (iii)	Introduction to Robotics
		SET/EI/BT/E705 (iii)	
	4	SET/EI/BT/E704 (iv)	Computer Architecture
		SET/EI/BT/E705 (iv)	

	SET/EI/BT/C706. BIOMEDICAL INSTRUMENTATION LAB	
	Content	No. of Hrs.
1.	Study of electrodes.	14x2
2.	Measurement of BP.	
3.	Measurement of PH.	
4.	Study of EEG, ECG, CAT-SCAN.	
5.	Visit to Pathological Lab.	
6.	Hospital visit to see demonstration of EEG, ECG, and CAT-SCAN.	
7.	MATLAB Simulation for biomedical signal analysis.	
	Total No. of Hours	28

	SET/EI/BT/C707. VACUUM INSTRUMENTATION AND THIN FILM DEPOSITION TECHNIQUES LAB		
	Content	No. of Hrs.	
1.	Study of rotary pump.	14x2	
2.	Study of diffusion pump.		
3.	Study of LPCVD setup.		
4.	Study of Oven.		
5.	Creating a vacuum.		
6.	Measurement of Vacuum/ low pressure.		
7.	Deposition of thin film.		
8.	Characterization of thin film properties.		
	Total No. of Hours	28	

SET/EI/BT/C708. PROJECT PREPARATION	
Content	No. of Hrs.
Project Preparation includes following assignments.	24x2
Survey and study of published literature on the assigned topic;	
Working out a preliminary approach to the Problem relating to the assigned topic;	
 Conducting Preliminary Analysis/ Modeling/ Experiment/ Simulation/ Experiment/ Design/ Feasibility 	
Preparing a Written Report on the Study conducted for presentation to the Department;	
• Final Seminar, as oral Presentation before a Departmental Committee.	
Total No. of Hours	48

SET/EI/BT/C709. INDUSTRIAL TRAINING SEMINAR	
Content	No. of Hrs.
Student shall prepare a detailed report on her/his industrial training and deliver a seminar of 30 minutes.	24x2
Total No. of Hours	48

NAVAYUGA ENGINEERING COMPANY LTD.

MULTI DISCIPLINARY CONSTRUCTION ENGINEERS



Date: 23.08.2022

TO WHOM IT MAY CONCERN

This is to hereby certify Mr.Deepak Sinwal S/o. Mr. Dharmbir Singh from HNBGU (Roll No. 19134504016) in appreciation of his work as a Trainee (intern) in RVNL (RKSH-KNPG) Rail Link Project Package-5. He worked under the leadership and supervision of our Manager(Electrical) Mr. Anil Kumar Chauhan, from 04th June 2022 to 04st July 2022.

During the tenure of his summer internship, we found him extremely hard-working, ambitious and meticulous.

We wish him good luck and every success in life and career.

For Navayuga Engineering Co. Ltd

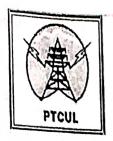
Authorised Senarouse

RVNL Site, H/o Mr. Kunwar Singh Negl, Village: Lachmoli, Post: Maletha, District -Tehri Garhwal, Uttarakhand - 249161, E-mail: rvnlpkg5@necltd.com

Website: www.necitd.com

691-2747362, Email : necvizag@navayuga CIN : U45203AP1986PLC006925





पावर द्राँसिशान कारपोरेशान ऑफ उत्तराखण्ड लि०

सहायक अभियन्ता (परिचालन एवं अनुरक्षण)
400 केंव्री0 परिचालन एवं अनुरक्षण, खन्तूखास, श्रीनगर (ग०)
गुरुगाग नं0-7000117047 र्थंगेल-ae1_oandm_srl_400@ptcul.org

CERTIFICATE

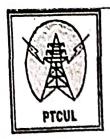
Certified that Mr-Mohd. Shuaib Student of Department of Instrumentation Engineering School of Engineering and Technology Hemvati Nandan Bahuguna Garhwal University, Srinagar (Garhwal)-246174. of second/third/fourth year B.Tech. Electrical and Instrumentation Engineering has been undergone an Industrial training at 400 KV Sub-station, Khandhukhal, Srinagar (G) of Four weeks during the above period he has been studied about woking of outdoor Sub-station, various types of electrical equipment & switchgears like as power and auto transformers, current & potential transformers, bus reactor & circuit breakers, isolators, bus bars, sub-station automation system, protection and metering system, PLLCC, battery banks etc.

Date-05.08.2022

for

D.P.DANGWAL

(ASSISTANT ENGINEER)
Assistant Engineer (O&M)
400 KV Sub Station
Khandukhal Srinagar (G)
7 *** Pauri (G)-246125



पावर द्राँसमिशान कारपोरेशान ऑफ उत्तराखण्ड लि0 (जतासळण्ड सरकार का उपक्रम)

राष्ट्रायक अगियन्ता (परिचालन एयं अनुरक्षण) 400 को०की० परिचालन एयं अनुरक्षण, खन्द्खाल, श्रीनगर (ग०) पूरुगण ग०-7086117847 धंगेल-ae1_oandm_srl_400@ptcul.org

CERTIFICATE

Department Mr-MD. Student of Certified that Ismail Instrumentation Engineering School of Engineering and Technology Hemvati Nandan Bahuguna Garhwal University, Srinagar (Garhwal)-246174 of second/third/fourth year B.Tech. Electrical and Instrumentation Engineering has been undergone an Industrial training at 400 KV Sub-station, Khandhukhal, Srinagar (G) of Four weeks during the above period he has been studied about woking of outdoor Sub-station, various types of electrical equipment & switchgears like as power and auto transformers, current & potential transformers, bus reactor & circuit breakers, isolators, bus bars, substation automation system, protection and metering system, PLLCC, battery banks etc.

Date-05.08.2022

100

D.P.DANGWAL

(ASSISTANT ENGINEER)
Assistant Engineer (O&M)
400 KV Sub Station
Khendukhal Srinagar (G)
Distt.-Pauri (G)-246125



इरकान इन्टरनशनल ।लामटड

(मारत सरकार का उपक्रम)

इस्मिन

IRCON INTERNATIONAL LIMITED

(A Govt. of India Undertaking) An integrated Engineering and Construction Company

No. IRCON/HRM/SUMMER INTERNSHIP/32

Date:30.08.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. MD Arshi, student of Hemvati Nandan Bahuguna Garhwal College, Uttrakhand has successfully completed Summer Internship at Ircon International Limited, NCRTC Project [Location-RSS Ghaziabad Project], from 10.06.2022 to 10.07.2022.

During the training his performance was found satisfactory.

For and on behalf of Ircon International Limited

(Kapil Malhotra)
Manager/HRM

कपिल मल्होत्रा / KAPIL MALHOTRA प्रबंधक / मा.स.प्र. / Managar/HRM इरकॉन इन्टरनेशनत तिमिटेड/IRGON INTERNATIONAL LIMITED (पारत सरकार का उपक्रमे// (A Goyt, of India Undertaking) रेल मंत्रात्म / Ministry of Railways सी-4, डिस्ट्रिक सेटर, साकेत/८-4, District Centre, Sakat नई दिल्ली-110017 / New Delhi-110017

Copy to:

- 1. Head of Department, Electrical Department, Hemvati Nandan Bahuguna Garhwal College, Uttrakhand.
- 2. Mr. MD. Arshi





NMRC/HR/1rg,2022/267

Date: September 06, 2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr/Ms Deepak Kumar student of B.Tech in Electrical & Instrumentation Engineering from Hemwati Nandan Bahuguna Garhwal University Uttarakhand, has undergone Internship of 4 weeks in Electrical department of Noida Metro Rail Corporation Ltd. w.e.f. 7th June 2022.

During the period of internship his/her performance was excellent and he/she was found diligent, hardworking and having inquisitive attitude.

(Rajani Bhardwaj) Assistant Manager/HR

RAJANI BHARDWAJ

Asstt. Manager/Human Resource
Noida Metro Rail Corporation Ltd.

July 08, 2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Priya Shah student of Electrical and Instrumentation Engineering enrolled in HNBGU Srinagar, Garhwal (A Central University) has successfully completed a One month Industrial Internship Training from 1st June 2022 to 1st July 2022 in our ongoing project "Construction of Tunnel and Rail Bridge, over River Alaknanda at Srinagar in connection with Rishikesh-Karanprayag New BG Rail line Project in the state of Uttarakhand, India" Under the guidance of Sh. A.M. Nautiyal (Resident Engineer).

During this period of her internship program with us, she had been exposed to different processes and was found diligent, hardworking and inquisitive.

We wish her every success in her life and career.

(SATYAJEET KHANDURI)
Project Manager
PMC/ARDANUY INDIA PVT LTD.
RVNL-SRINAGAR

CERTIFICATE

I hereby declare that the Industrial Internship Report entitled "Bharat Heavy Electricals Limited (BHEL)" submitted by me to HEMVATI NANDAN BAHUGUNA GARHWAL UNIVERSITY, Srinagar in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Electrical and Instrumentation Engineering is a record of bonifide industrial training undertaken by me under the supervision of to Mr. Rajendra Kumar. I further declare that the work reported in this report has not been submitted and will not be submitted, either in part or in full, for the award of any other degree or diploma in this institute or any other institute or university.



भारत हेवी इलेक्ट्रिकल्स लिमिटेड रानीपुर, होरेद्वार

BHARAT HEAVY ELECTRICALS LIMITED, RANIPUR, HARIDWAR

TRAINING CERTIFICATE

Registration No.: HWR/HRDC/202101216

Certificate No.: HWR/HRDC/202101112

Mr ANKIT RAWAT Son/Daughter/Wife of SI ri SURENDRA SINGH RAWAT, Student of HEM/VATI NANADAN BAHUGUNA GARHWAL UNIVERSITY, SRINAGAR GARHWAL (UTTAR/ KHAND), ELECTRICAL ENGINEERING Branch has undergone Vacational Training in BHARAT HEAVY ELECTRICALS LIMITED, HAI IDWAR from 10.06.2022 to 09.07.2022.

The area of training was CONTRUCTION &V 'ORKING OF TURBO GENERATOR

The performance of the trainee during the above training period was VERY GOOD.

Date: 12 07 2022

(Checked by)

(Section Incharge)

मन्द्र गुक्ता ं अभियंता

Certificate



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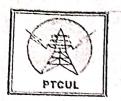
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Instrumentation Ungineering School of Lagineering and Lechnology Neuroni Nandan Bahuguna Carhwal University, Stringgar (Carlwell-24014 of seconds and found, reached to be before the foundation of Engineering has been undergone and to the foundation of School Sc

Date-05.08.2022

D.P.DANGN QL (ASSISTANT ENGINEER)

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पावर द्वाँसगिशन कारपोरेशन ऑफ उत्तराखण्ड लि० (उत्तराखण्ड शरकार का उपक्रम)

सहायक अभियन्ता (परिचालन एवं अनुरक्षण) 400 के०वी० परिचालन एवं अनुरक्षण, खन्दूखार्ल, श्रीनगर (ग०) पूरुगाप नं0-7088117847 - \$मेल-ae1_oandm_sri_400@ptcul.org

CERTIFICATE

Certified that Mr-Amlandeep Bori Student of Department of Instrumentation Engineering School of Engineering and Technology Hemvati Nandan Bahuguna Garhwal University, Srinagar (Garhwal)-246174 of second/third/fourth year B.Tech. Electrical and Instrumentation Engineering has been undergone an Industrial training at 400 KV Sub-station. Khandhukhal, Srinagar (G) of Four weeks during the above period he has been studied about woking of outdoor Sub-station, various types of electrical equipment & switchgears like as power and auto transformers, current & potential transformers, bus reactor & circuit breakers, isolators, bus bars, sub-station automation system, protection and metering system, PLLCC, battery banks etc.

Date-05.08.2022

D.P.DANGWAL

(ASSISTANT ENGINEER)

Assistant Engineer (O&JA)

400 KV Sub Station

Khandukhal Srinagai (G)

Distt.-Pauri (G)246125

way fit Line!

MSIL: PROJ: 2022-23 Date: 11-Jul-2022

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Mr. YASH PAL SINGH NEGI Student of H.N.B. GARHWAL UNIVERSITY, SRINAGAR has undergone project training with Maruti Suzuki India Limited, Manesay as per Details given below

Project Title

: Identification of look a like and interchangable parts poke-yoke and

planning

Training Period

10-Jun-2022 to 09-Jul-2022

Department / Division : AS-MC

He has completed the above period to our satisfaction and our assessment of his overall project efforts. & Learning is EXCELLENT.

The grading scales used at Maruti Suzuki India Limited are :

- Excellent
- · Very Good
- Good
- Satisfactory
- · Poor

During the training we found him hardworking leager to learn and with good initiative. He was able to develop good inter personal relations with people in the Department /Division.

We wish him very best in his future career.

With Best Wishes

Vinay Rastogi

(Jan of

General Manager - Human Resources

MARUTI SUZUKI INDIA LIMITED

Head Office

Mandi Suzial India Limited

1. Nelson Mandels Road Vasant Kung.

New Cetti - 110070, India

Tal 013.46781030 Fax 011-46150275-46150276

First of content profession was reproduced from

Gurgaem Plant

Manuti Suzuki India Ermited.

Old Palam Gurgaon Road.

Gurpaon - 122015 Haryana, India

Tel: 0124-2345721, Fax: 0124-2341304

Manestar Plant

Manch Sussai India Lineland

Plot no 1, Phase - 3A, 23T Manesan

Gurgaon - 122051 Haryana kross

Tel 0124-4654000 Fee 0124-4554 Visi



भारत हेवी इलेक्ट्रिकल्स लिमिटेड रानीपुर, हरिद्वार

BHARAT HEAVY ELECTRICALS LIMITED, RANIPUR, HERIDWAR

TRAINING CERTIFICATE

Regist ation No.: HWR/HRDC/202101214

Certificate No.: HWR/HRDC/202101113

Mr MC HIT SINGH RAWAT Son/Daughter/Wife of Shri DALBEER SINGH RAWAT, Student of HEMWAT NANADAN BAHUGUNA. GARHLIAL UNIVERSITY, SRINAGAR GARHWAL (UTTAR AKHAND), ELECTRICAL ENGINEERING Branch has undergone Vacational Training in BHARAT HEAVY ELECTRICALS LIMITED, HARIDWAR from 10.06.2022 to 09.07.2022.

The arms of training was COMTRUCTION &WORKING OF TURBO GENERATOR

The ps formance of the trainee during the above training period was VERY GOOD.

Date: 09.07, 2022

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(Section Incharge)

नन्धु शुक्ता

माना तसाधन विकास क-शे.ए० इ.एस. क्लेपुर हरे



पावर द्रौसिमशन कारपोरेशन आफि एत्तराखाण्ड लिए (जलगलण्ड गरकार का पणका)

राहायक अभियत्ता (परिचालन एवं अनुस्ताण) 400 क्षेठवीठ परिचालन एवं अनुस्ताण, चन्त्रूवांत, भीनाव (110) इत्याप क्षेत्र-१०व्यासकार इंगेल-२01_pandm_sti_400@ptcul.org

CERTIFICATE

Certified that Mr-Sumit Pushpendra Student of Department of Instrumentation Engineering School of Engineering and Technology Hemvati Nandan Bahuguna Garhwal University, Srinagar (Garhwal)-246174 of second third fourth year B.Tech. Electrical and Instrumentation Engineering has been undergone an Industrial training at 400 KV Sub-station, Khandhukhal, Srinagar (G) of Four weeks during the above period he has been studied about woking of outdoor Sub-station, various types of electrical equipment & switchgears like as power and auto transformers, current & potential transformers, bus reactor & circuit breakers, isolators, bus bars, sub-station automation system, protection and metering system, PLLCC, battery banks etc.

Date-05.08.2022

D.P.DANGWAL

(ASSISTANT ENGINEER)
ASSISTANT ENGINEER)
-00 KV Sub-Station
Khanduknal Srinagar (G)
Distt.-Pauri (G)-246125



पावर द्रौसमिशन कारपोरेशन ऑफ उत्तराखण्ड लिंठ (पत्तराखण्ड शरकार का उपकार)

राहायक अभियत्ता (परिचालन एवं अनुख्याण) 400 के0पी0 परिचालन एवं अनुस्मण, खन्दूखाल, श्रीनगर (ग0) प्रभाव नए-रव्यवानरकार प्रील-संब _oandm_sri_400@ptcul.org

CERTIFICATE

Certified that Mr-Naveen Kumar Student of Department of Instrumentation Engineering School of Engineering and Technology Hemvati Nandan Bahuguna Garhwal University, Srinagar (Garhwal)-246174 of second/third/fourth year B.Tech. Electrical and Instrumentation Engineering has been undergone an Industrial training at 400 KV Sub-station, Khandhukhal, Srinagar (G) of Four weeks during the above period he has been studied about woking of outdoor Sub-station, various types of electrical equipment & switchgears like as power and auto transformers, current & potential transformers, bus reactor & circuit breakers, isolators, bus bars, sub-station automation system, protection and metering system, PLLCC, battery banks etc.

ap-of.

Date-05.08.2022

D.P.DANGWAL

(ASSISTANT ENGINEER)

Assistant Engineer (Osim)

400 KV Sub Station

(Chandukhal Srinagar (G)



Ref: DPG/DL/22/01

Date: 13/07/2022

TO WHOM IT MAY CONCERN

This is to certify that Mr. Ayush Mishra, S/O- Mr. Vijay Kishore Mishra, a student of Electrical and Instrumentation Engineering enrolled in Hemvati Nandan Bahuguna Garhwal University (HNBGU), Srinagar, Garhwal has successfully completed one month (From 13 June 2022 to 13 July 2022) long internship program at "Voltas limited DPG division, Delhi, India (at NBCC project site)". Under the guidance of Mr. Sudhanshu Mishra (Manager projects). During the period of his internship program with us he was found punctual, hardworking and inquisitive.

We wish him every success in life.

Authorized Signature

VOLTAS LIMITED

Domestic Projects Group

A-41. Mohan Co-operative Industrial Estate. Mathura Road, New Dethi - 130044. Tel: 011-66505550, Fax. 011-26950022/81. Website: www.voltas.com Corporate Identity Number L29308MH1954PLC009311

A TATA Enterprise

NMRC/HR/Trg.2022/229

Date: 25th August, 2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr/Ms Aqil Hasan, student of B.Tech in Electrical & Instrumentation Engineering from Hemvati Nandan Bahuguna Garhwal University Uttarakhand has undergone Internship of 4 weeks in Electrical department of Noida Metro Rail Corporation Ltd. w.e.f. 7th June 2022.

During the period of internship his/her performance was excellent and he/she was found diligent, hardworking and having inquisitive attitude.

(Rajani Bhardwaj) Assistant Manager/HR RAJANI BHARDWAJ

Asstt. Manager/Human Resource Noida Metro Rail Corporation Ltd.



NMRC/HR/Trg.2022/266

Date: September 06, 2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr/Ms Ashutosh Kumar student of B.Tech in Electrical & Instrumentation Engineering from Hemwati Nandan Bahuguna Garhwal University Uttarakhand, has undergone Internship of 4 weeks in Electrical department of Noida Metro Rail Corporation Ltd. w.e.f. 7th June 2022.

During the period of internship his/her performance was excellent and he/she was found diligent, hardworking and having inquisitive attitude.

(Rajani Bhardwaj) Assistant Manager/HR

RAJANI BHARDWAJ Asstt. Manager/Human Resource Noida Metro Rail Corporation Ltd.

Date: 23.08.2022

TO WHOM IT MAY CONCERN

This is to hereby certify Mr.Nikhil S/o. Mr. Uttam Singh Silwal from HNBGU (Roll No. 19134504008) in appreciation of his work as a Traince (intern) in RVNL (RKSH-KNPG) Rail Link Project Package-5. He worked under the leadership and supervision of our Manager (Electrical) Mr. Anil Kumar Chauhan, from 04th June 2022 to 04st July 2022.

During the tenure of his summer internship, we found him extremely hard-working, ambitious and meticulous.

We wish him good luck and every success in life and career.

For Navayuga Kngineering Co. Ltd

Authorised Signator

RVNL Site, H/o Mr. Kunwar Singh Negi, Village: Lachmoli, Post: Maletha, District -Tehri Garhwal, Uttarakhand - 249161, E-mail : rvnlpkg5@necltd.com

Corp. Office: Plot No. 379, Road No. 10, Jubilee Hills, Hyderabad - 500 033.

Tel.: +91-40-44557789, 29559990/91/92, Fax: +91-40-23557789, Email: nec@navayuga.com

Regd. Office: 48-9-17, Dwarakanagar, Visakhapatnam - 530 016.

Tel.: +91-891-2754602, 2747335, Fax: +91-891-2747362, **Email**: necvizag@navayuga.com Website: www.necltd.com CIN: U45203AP1986PLC006925



ISO BOOT : BOY



पावर द्राँसिमशन कारपीरेशन ऑफ उत्तराखण्ड लि०

राष्ठायक अभियन्ता (परिचालन एवं अनुरहाण) 400 के०वी० परिचालन एवं अनुरहाण, खन्दूरवाल, श्रीनगर (ग०) पूरुगण चं0-7000117047 क्षेत्रेल-ae1_oandm_sri_400@ptcul.org

CERTIFICATE

Department Certified Mr-M. that Student of Vikram Instrumentation Engineering School of Engineering and Technology Hemvati Nandan Bahuguna Garhwal University, Srinagar (Garhwal)-246174 of second/third/fourth year B.Tech. Electrical and Instrumentation Engineering has been undergone an Industrial training at 400 KV Sub-station, Khandhukhal, Srinagar (G) of Four weeks during the above period he has been studied about woking of outdoor Sub-station, various types of electrical equipment & switchgears like as power and auto transformers, current & potential transformers, bus reactor & circuit breakers, isolators, bus bars, substation automation system, protection and metering system, PLLCC, battery banks etc.

Date-05.08.2022

D.P.DANGWAL

(ASSISTANT ENGINEER)
400 KV Sub Station
anduknal Srinagar (G)
*-Paun (G)-246125



NMRC/HR/Trg.2022/228

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Date: 25th August, 2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr/Ms Azhar Uddin, student of B.Tech in Electrical & Instrumentation Engineering from Hemvati Nandan Bahuguna Garhwal University Uttarakhand has undergone Internship of 4 weeks in Electrical department of Noida Metro Rail Corporation Ltd. w.e.f. 7th June 2022.

During the period of internship his/her performance was excellent and he/she was found diligent, hardworking and having inquisitive attitude.

(Rajani Bhardwaj)
Assistant Manager/HR
RAJANI BHARDWAJ
Asstt. Manager/Human Resource
Noida Metro Rail Corporation Ltd.