

Corporate Office – BW Unit
O/o PGM(BW),
Telegraph Office Building, Kashmere Gate,
Delhi -110006
☎011-23864246. ☎ 011-23865284



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

BSNL 2G))) BSNL LIVE
Faster than your thoughts 2010

No Summer Trg/ALTTC/M(BW-III).

Dated: 06.03.2012.....

To,
All Pr. CEs (Civil)/CEs(Civil)
BSNL Civil Zone

Sub: Summer Training for B-Tech Students (Civil) – Train the trainers program regarding.

Please find enclosed herewith GM (BS-Civil), ALTTC letter no: 61/ALTP/GM (BS-C)/Summer Training/2011 Dated:02/12/2011, to conduct the summer training programme for B-Tech Students of Civil Stream at ALTTC, as well as, in all Civil Zones to generate the revenue for BSNL. For this, ALTTC, Ghaziabad has developed a four week summer training programme as per annexure, with sessions/topics spanning over three half days a week. (This is to be done using our expert human resource and utilizing the infrastructure of RTTCs/CTTCs/DTTCs).

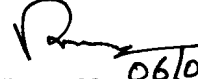
(2) Now, ALTTC, Ghaziabad is going to organize the faculty development programme (FDP) of one week duration, for all Zonal units. Training material (in PPTs & Text documents) will also be supplied by ALTTC in first instance. Complete details are there in the above letter of GM (BS-Civil), however, it is highlighted that for this 'train the trainers' programme; each Zonal unit should nominate four persons. Out of these four persons so nominated, at least two should be Graduate Engineers.

(3) The first 'train the trainer programme' will be started very soon by ALTTC, details of which will be available on CTMS portal of BSNL. Therefore all the Zonal Chief Engineers are requested to pay their attention to this initiative of (BS-Civil) faculty of ALTTC and nominate the competent personnel.

(4) Training fee to be charged for this course shall be fixed by the Corporate Office, (same as in the case of Electronics and Communication stream students vide letter No.16-1/2009-Trg. Dated 15.04/2010).

Therefore, all the Chief Engineers are requested to kindly have liaison with GM (BS-Civil), ALTTC for conducting this commercial training under intimation to this unit and make this initiative a grand success.

Encl: As above.


(Vinay Kumar)
AGM (BW-I),
06/03/2012.

Copy to all CGMs, BSNL Telecom Circles.

**COURSE CONTENTS
FOR SUMMER TRAINING FOR
B. TECH. CIVIL ENGINEERING STUDENTS**

WEEK-1

DAY-1

TOPIC	Hrs Minutes
Registration of Participants, Introduction of Participants & Course Introduction	1 Hr
Overview of execution of Building Project-Inception to Handing Over	2 Hr 30 Min
<ul style="list-style-type: none"> • Planning & estimation after requisition • Pre-tendering process after obtaining Administrative approval/Expenditure Sanction • Tendering process & award of work • Execution & Completion 	

DAY-2

TOPIC	Hrs Minutes
Estimation & Quantity Surveying	
<ul style="list-style-type: none"> • Quantity Survey 	1 Hr
<ul style="list-style-type: none"> • Estimation 	1 Hr
<ul style="list-style-type: none"> • Hands on Session 	1 Hr 30 Min

DAY-3

TOPIC	Hrs Minutes
Structural Design of Buildings – Design Parameters & Codal Provisions	
<ul style="list-style-type: none"> • Assessment of Loads-(Vertical & Horizontal) 	1 Hr
<ul style="list-style-type: none"> • Design of Beams & Slabs 	1 Hr 30 Min
<ul style="list-style-type: none"> • Design of Columns 	
<ul style="list-style-type: none"> • Design of Isolated & Combined Footings 	1 Hr

WEEK-2

DAY-1

TOPIC	Hrs Minutes
Overview of Computer Aided Structural Design through STAAD Pro	
<ul style="list-style-type: none"> • Introduction to Computer Aided Structural Design of Buildings 	1 Hr
<ul style="list-style-type: none"> • Features of STAAD Pro Software 	1 Hr
<ul style="list-style-type: none"> • Typical Command sequence of STAAD Pro & Brief Demonstration 	1 Hr 30 Min

DAY-2

TOPIC	Hrs Minutes
CPWD Building Specifications & Relevant I.S. Codes	
<ul style="list-style-type: none"> • Overview of CPWD specification & I.S. Codes 	1 Hr
<ul style="list-style-type: none"> • Specification of some items like CC, RCC, Floorings & Finishing work 	1 Hr
<ul style="list-style-type: none"> • Specification of laying of W.S. & Sanitary Installation including mode of measurements. 	1 Hr 30 Min

DAY-3

TOPIC	Hrs Minutes
CPWD Building Specifications & Mandatory Tests	
• Necessity of testing and Frequency	1 Hr
• Testing procedure of Field Tests	1 Hr
• Testing results and acceptance criteria	1 Hr 30 Min

WEEK -3**DAY-1**

TOPIC	Hrs Minutes
Building Services – External/Internal Water Supply	
Planning, Design & Execution of Water Supply (W/S)	3 Hr 30 Min
• Quality of Water	
• Demand Calculation of water	
• Design of External W/S System	
• Design of Internal W/S System	

DAY-2

TOPIC	Hrs Minutes
Building Services – External/Internal Sanitation	
• Design & Execution of Sanitary Installation - External	1 Hr 45 Min
• Design & Execution of Sanitary Installation - Internal	1 Hr 45 Min

DAY-3

TOPIC	Hrs Minutes
Quality Control & Effective Inspection of Building Works	
• Quality Control & Effective Inspection of Building Works	3 Hr 30 Min

WEEK-4**DAY-1**

TOPIC	Hrs Minutes
Building Maintenance	
• Effective Maintenance of Buildings	1 Hr 45 Min
• Precaution in planning & construction of buildings for Minimal Maintenance	1 Hr 45 Min

DAY-2

TOPIC	Hrs Minutes
Water Conservation & Rain Water Harvesting	
• An overview	1 Hr 45 Min
• Planning, Design & Execution of Rain Water Harvesting Systems	1 Hr 45 Min

DAY-3

TOPIC	Hrs Minutes
Expansive Soil – Problem & Remedial Measures	
• Description & properties of Expansive Soils	1 Hr
• Problems faced in Expansive Soils	1 Hr
• Remedial Measures	1 Hr 30 Min

4 Weeks x 3 days = 12 days

12 days x 3Hr 30 Min = 42 Hrs.



BHARAT SANCHAR NIGAM LIMITED
(A GOVT OF INDIA ENTERPRISE)

By Speed Post/



OFFICE OF THE CHIEF GENERAL MANAGER
ADVANCED LEVEL TELECOM TRAINING CENTRE
RAJNAGAR, GHAZIABAD-201002

No: 61/ALTP/GM(BS-C)/Summer Training/2011
Dated: 02/12/2011

To,

The Principal General Manger (BW),
BSNL Corporate Office, BSNL,
Telegraph Office Building, Kashmiri Gate,
Delhi- 110 006.

Subject: Summer Training for B-Tech Students (Civil)-Train the trainers programme regarding.

It is submitted that in its endeavour to generate more and more revenue, especially in present circumstances of financial crunch, BSNL Civil Wing at ALTTC, had mooted a proposal for conducting the four weeks summer training programme for B-Tech Students of Civil Engineering stream. Not only, proposal was well appreciated by the Competent Authority of ALTTC but also course content matter was finalized (copy of course contents is enclosed). While text documents and power points presentations for the approved course content are getting final shape, it is further proposed as under:-

- (i) In addition to conducting training at ALTTC, Ghaziabad, this four weeks Summer Training Programme may be conducted at Zonal level also on All India Level Basis. Each Zonal Chief Engineer shall be responsible for conducting this training for the area/jurisdiction under his control in collaboration with BSNL RTTC/CTTC or DTTC.
- (ii) Course material in the form of text documents and power presentations, both in hard and soft copy, shall be supplied by ALTTC for uniformity of action.

(iii) ALTTC will conduct 'train the trainers' programme also for all Zonal units of BSNL to familiarize and train them as to how this training is to be conducted. For this training programme, all Zonal Chief Engineers will be requested to nominate four persons from their unit for 'train the trainers' programme.

(iv) Each Zonal Chief Engineer will be requested to nominate those persons who have interest in training activities and out of four persons so nominated, it will be required to nominate at least two Graduate Engineers.

(v) Thus approximately around 100 persons across the country will be required to be trained by ALTTC in 'train the trainers' programme who will be imparted training batch wise in three to four batches. This 'train the trainer' programme will be of one week.

(vi) As per this scheme, after completion of above exercise, each Zonal unit will impart summer training to B-Tech students at their level coming in their area/jurisdiction in collaboration with BSNL RTTC/CTTC or DTTC. After completion of training, each trainee shall be given training material in hard copy (text document) as well as in CD form (soft copy). Training fee to be charged for this course shall be as fixed by Corporate Office, New Delhi (same as in the case of Electronics and Communication stream students).

Above proposal is submitted herewith for your kind perusal and further necessary action please. It is requested that necessary directions to respective Zonal Chief Engineers may kindly be issued after due consideration please.

Encl: As Above

Sd/-
(P.K.Jain)
General Manager (BS-Civil),
BS-Civil Faculty,
ALTTC, RajNagar,
Ghaziabad.

O/o GM(Trg), 102, 1st Floor,
Bharat Sanchar Bhavan, Janpath
H.C. Mathur Lane, New Delhi-110001
Tel: 011-23714014, 23037513
Fax: 011- 23356657



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BSNL 3G)))) BSNL LIVE
Focus than your thoughts
2010

No. 16-1/2009-Trg

Dated: 15/04/2010

To:

**All Chief General Managers, Territorial Circles
Chief General Manager, ALTTC, BRBRAITT
Principals of Training Centers**

Sub: **Summer Trainings for Engineering Students**

This is in continuation of this office letter no.16-1/2009-Trg dated 11th Feb-2010 whereby field units, have been encouraged to endeavor for conversion of BSNL's technical expertise & training resources into innovative schemes of revenue generation in the overall interest of the organization.

We are envisioning of selling our 'knowledge-products' under the brand name 'BSNL Learning', much like our any other existing telecom service products 'BSNL Landline' or 'BSNL Broadband' etc available in the open market. This has been our focus area for some recent past and we are greatly encouraged by the enthusiasm exhibited by the field units under the lead roles of our training centers. We have taken few steps, have made a small beginning within this new initiative and we are confident of making long-term gradual impact with the belief that we have a huge potential & opportunity at our disposal.

With the huge spread of 'engineering' education across the various nooks & corners of the country, and the emerging importance of telecommunications in most of the engineering streams, our technical expertise and training resources in telecommunication domain are ideally placed to address the needs of this segment of our populace by helping them enhance their awareness as well as employability.

Though there are various possibilities of our offerings, an immediate opportunity is the 'Summer Training' as part of curriculum of engineering during IInd /IIIrd year of studies. Normally students seek their summer trainings of 4 weeks/ 6 weeks' duration during the period May-June-July. Engineering students, pursuing any of the following streams can be a target group:

- Electronics & Telecommunications
- Information Technology
- Computer Sciences
- Electrical

As mentioned earlier, some of the training centers already have experience of organizing such 'Summer Training' courses albeit in heterogeneous manner as per their own prudence, appreciation of local understanding, surrounding environment and market conditions.

Despite acknowledging the extensive diversities across the geographical spread, it is felt that some general reference guidelines should be put in place in order to give a somewhat homogeneous look in terms of contents, schedules, structure and rates of our 'Summer Training' offerings. **Local field units should use these as broad reference while working out their own location-specific products based upon demand as well as their resourcefulness.**

Consultations among the training centers followed up by the deliberations in the committee, recently formed for the BSNL's participation in the international training delivery, have resulted into these reference guidelines for all. **(This letter plus Attached Annexure)**

A. Contact, Reach & Programme Highlights

The students from the places where our training centers exist, can be addressed by our training centers while for other places, SSAs can run such programme with the assistance/guidance of nearby training centers. The lab facilities, which can be provided to the participating students, can be suitably substituted by the exposure to field-operations/field visits. **The training centers will proactively hold responsibility of guiding/supporting the SSAs within their vicinity zones. As such, the training centers will lead the initiative, till SSAs are able to hold on themselves.**

While a lot of engineering students themselves approach our offices for such summer trainings, we should facilitate their association with us through spread of information regarding our readiness/initiative in offering such summer trainings with a clear emphasis on the value-add that we would provide to the students. **The structure of the offered courses, the richness of course contents, the resource quality of BSNL in such delivery, the practical exposure to the telecom network and the job related clarity to the students, are some of the features which need to be clearly highlighted at various appropriate forums, engineering colleges etc..** The training co-coordinators at each of the SSAs/units should be the nodal points for any interface and they should be aggregators of such training demands from engineering students. A sample pamphlet/brochure is enclosed in the Annexure for immediate distribution at concerned points of interests.

B. Resources:

For exploring the resource persons for the SSAs, we have recently called for the volunteers for empanelment as experts. While we will shortly publish the name of these volunteers for the information of all, field officers who have not expressed their interests, can take up these responsibilities in agreement with their heads of units/SSAs.

C. Certification:

Certificates in standard formats (to be circulated shortly) would be issued by the concerned field units/training centers to the participating students, after completion of their trainings. Incorporation of post-training assessment of the students is being worked out and would be communicated soon. The certificates would have a mention of the assessment grading for each of the students.

D. Remuneration:

The remuneration for our staff, in training centers and in the field, towards their extra contributions for these initiatives, has already been defined and circulated for information vide our letter no. 16-1/2009-Trg dated 11th Feb-2010.

E. Targets:

For the training centers, their targets have been kept as **“Minimum Revenue Earnings to the tune of One month of their respective Staff Salary Bill”** out of this summer training initiative. The training centers that would excel in maximizing their revenues would be distinctly felicitated.

For the field units/SSAs, CGMs may like to assign some revenue targets in proportion to availability of Engineering colleges in various SSAs. We feel that all the cities/areas having status of B2 & above along with many of the Urban Agglomerations (UA), should comfortably aspire to cover at least **250 students** during this summer excluding what training centers garner.

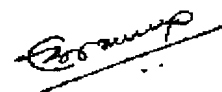
F. Support:

Any issues, which may appear to be coming in the way, can be raised to this office for deliberations/redressal so that we do not miss the opportunity. For further awareness and support, ALTTC, RTTCs at Hyderabad, Bhubaneswar, Kalyani, Chennai, Ranchi, CTTC Kolkata can be contacted who have passionately pursued this initiative.

G. Appreciation & Appeal:

Training Cell would like to appreciate & acknowledge the support and enthusiasm being extended by the training centers, in pursuing this initiative & issuing of these guidelines.

We solicit support & direct participation of our Principals of RTTCs/CTTCs/DTTCs and Training Co-ordinators at Circle/SSA level, to lead and make a meaningful contribution out of this initiative/opportunity.



**Neeraj Verma
GM (Training)**

Copy for information to:

1. CMD, BSNL Board
2. All Functional Directors, BSNL Board

Regd. Office : Bharat Sanchar Bhavan, Janpath, H.C. Mathur Lane, New Delhi-110 001
Corporate Office : Bharat Sanchar Bhavan, Janpath, H.C. Mathur Lane,, New Delhi-110 001
Website: www.bsnl.co.in

SUMMER/INDUSTRIAL/VACATION TRAINING ON TELECOM TECHNOLOGIES **for Engineering Students**

OBJECTIVE:

- To familiarize the students with all the main telecommunication technologies – Switching, OFC, Mobile, CDMA, Broadband, TCP-IP
- To give an exposure to the working/live telecommunication equipment deployed in BSNL
- To prepare the students for selecting the areas of their choice to enter the telecommunication industry

TARGET POPULATION:

- Students of Electronics & Communication who have completed the 2nd / 3rd year of engineering curriculum.
- Students of fourth year who want to get an exposure to this field, and haven't attended such program in previous years
- Students of IT, Instrumentation, Control Systems Engg./Computer Science & Engg./Information Technology/Electrical Engineering who have studied/are studying Electronics in their courses

DURATION: Four weeks/Six weeks

DELIVERY MODE: At training centre (Course-I) and at SSA/Field units (Course-II). There are many requests being received at SSAs and the students would like to have their vacation training at that place. A toned down module for delivery at SSA is also designed and fees fixed accordingly. The faculty for SSA delivery can be trained by RTTC if required and the empanelled experts can also be used.

FEES: Board/Lodge extra, if provided.

Course-I (Delivery at Training Centres) : Non-Residential

- Rs 4,000 for four week module (Lecture: 4 sessions+ Lab/Site Visit: 2 sessions/ week)
- Rs 1,000 for every additional week per student
- Service Tax extra as per actual

Course-II (Delivery at Field/SSA Units): Non-Residential

- Rs.2500 for four week module (Lecture: 2 sessions+ Site Visit: 2 sessions/ week)
 - Service Tax extra as per actual
-

COURSE-I: CONTENTS FOR TRAINING CENTRE DELIVERY

WEEK - I

	Registration of Participants, Introduction of participants, Introduction to the course	1.5 hrs
	Overview of Telecommunication Networks – I	
DAY-1	<ul style="list-style-type: none">• Network architecture• Local and trunk network• Call Routing• A typical telephone exchange	1.5 hrs
	Overview of Telecommunication Networks – II	
	<ul style="list-style-type: none">• Institutional mechanism and role• National - DOT, TRAI, TDSAT, TEC, CDOT• International - ITU, APT, ETSI etc.	1.5 hrs
DAY-2	<ul style="list-style-type: none">• Job opportunities in Telecommunication market – Government and Statutory bodies, Standardisation Bodies, R&D, Manufacturers, System Integrators, Network Operators, Service Providers, Resellers, Content and VAS Providers, Service Provisioning and Retailing, Billing and OSS• Licensed telecommunication services of DOT	1.5 hrs
	Assignment: Explore designated websites of Institutions and Companies	
	PCM Principles & Multiplexing of Telecommunication Signals, CAS and CCS#7 signalling	1.5 hrs
Day 3	Digital Switching Principles	1.5 hrs
	Introduction to The Latest Switches in Telecommunication Industry	

WEEK - V

DAY-1	Corporate networks, Intranets, leased lines, MLLN	3.0 hrs
DAY-2	WiMAX, WiFi	1.5 hrs
	MPLS VPN	1.5 hrs
DAY-3	Visit to the MLLN & MPLS VPN Labs/Installations	3.0 hrs

WEEK - VI

DAY-1	Emerging Trends In Telecommunication: 3G, NGN & Other Developments	2.0 hrs
	Billing of telecommunication services	1.0 hrs
DAY-2	Visit to NIB, 3G installations, Billing systems	3 hrs
DAY-3	Post course test for fifth and sixth week	1.5 hrs
	Valedictory session for 6week module and discussion of test	1.5 hrs

- **Cellular principle**
- **GSM Principles, network architecture, Call Processing, Hand-over, Roaming, GPRS, EDGE**
- **CDMA Technology – CDMA Principles, Network Architecture, Call Processing, handover, Roaming, EVDO**
- **Mobile Services- Post paid, Prepaid, SMS, VAS, Data**
- **Visit to GSM, CDMA installations**
- **Assignment for the week**



BSNL Launches SUMMER TRAINING for ENGINEERING students.

Objective	<ul style="list-style-type: none"> • To give an overview of a range of telecommunication technologies • To give an exposure to working/live telecommunication equipment deployed in BSNL • To help enhance awareness of the students on various job options in the telecommunication industry
Mode	Part Time sessions on Theory/Labs/Installation visits, Self-Study, Assignment, Evaluation, Certification
Duration	<ol style="list-style-type: none"> 1. Formal focussed Training at Well equipped Training Centres with in-plant/ Lab visits:6 weeks Course-A level / 4 weeks -Course-B level 'OR' 2. In-plant training at BSNL Field Units :4 weeks
Eligibility	2 nd /3 rd Year Engineering students of streams of Electronic & Communications, Computer, IT, Electrical
Deliverables	<p>Topics Covered:-</p> <ul style="list-style-type: none"> • Overview of Telecommunication Networks • PCM Principles, CCS#7 signalling. • Introduction to the Latest Switches in Telecommunication Industry • Fibre-Optic Communication Technology • Mobile Communication – GSM, CDMA • Broadband Technologies • Intelligent Networks • Job opportunities in Telecommunication market <p>Labs/ Visits to Installations:.....</p> <ul style="list-style-type: none"> • Visit to Telephone Exchange and Local Network • Visit GSM, CDMA, Broadband and OFC installations/ Exposure to live systems in labs.
Period	May- June-July-2010
Training Fees	<p>A Level (6 weeks/ 36 sessions) : Rs. 6000 + S/Tax</p> <p>B level (4 weeks/ 24 sessions) : Rs. 4000+ S/Tax</p> <p>In-Plant only(4 weeks/ 16 sessions): Rs2500+ S/Tax</p> <p>Requisite fees in the form of DD in favour of</p>
Batches Commencing on	<i>To be entered by the unit</i>
Venue	<i>To be entered by the unit</i>
Reading Material	Handouts on the topics (at Training Centres), Reference Compilation of Topics: In the form of CD and Library Access (at Training Centres)
Post Course Assessment	Assignments/ Tests By BSNL Experts
Certificate	Appropriate certificate will be issued along with performance assessment by BSNL for each of the students
How to Enroll	As per enclosed format
Contact	<i>To be entered by the unit</i>
Visit us	<i>Website details wherever available to be entered by the unit</i>
Last date of Registration	<i>To be entered by the unit</i>