

16-11/2015-Pers./TEC
Government of India
Department of Telecommunications
Telecommunication Engineering Centre
K.L. Bhawan, Janpath, New Delhi – 110001

Dated: 19th September, 2018


OFFICE MEMORANDUM

Subject: Circulation of Internship Scheme of Telecommunication Engineering Scheme.

Kindly find enclosed herewith, a copy of 'Internship scheme' for Telecommunication Engineering Centre, Department of Telecommunications, New Delhi duly approved by competent authority. The scheme may be given wide publicity.

The soft copy of the Internship scheme is being uploaded on the web sites of TEC & DoT.

This issues with the approval of competent authority.


(Dinesh Sharma) 19.9.18
Director (Estt.)

Enclosure: - As above

Copy for information to: -

1. PPS to Member (S)/Member (T), Telecom Commission, New Delhi.
2. DDG(Estt.)/DDG(Personnel), DoT, New Delhi.
3. All DDGs of TEC/RTEC.



सत्यमेव जयते

Government of India
Ministry of Communications
Department of Telecommunications
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110001

TELECOMMUNICATION ENGINEERING CENTRE (TEC)

INTERNSHIP SCHEME

1.0 OBJECTIVE:

- 1.1 Telecommunication Engineering Centre (TEC) is a technical arm of Department of Telecommunications (DoT) and responsible for formulation of standards, specifications, test procedures, service specifications and technical regulations for communication sector. TEC seeks to promote and ensure standardization in the telecom sector and matters connected therewith or incidental thereto. It also provides technical/policy inputs to DoT, TDSAT, TRAI, C-DoT etc. TEC is also a Designating Authority (DA) for Conformity Assessment Bodies (CABs) and Certification Bodies (CBs) for telecom sector in India. The technical work at TEC Headquarters is divided among various Divisions such as Mobile, Radio, Information Technology, Internet of Things, Smart Network, Next Generation Switching, Transmission, Fixed Access, Future Networks, Telecom Certification, Standardization etc. List of Divisions and their work areas are given at Annexure-I. Besides its headquarters in New Delhi, there are regional offices for Northern, Eastern, Western and Southern Regions located at New Delhi, Kolkata, Mumbai and Bengaluru respectively.
- 1.2 In order to study/ formulate/ operationalize/ assessment of various works/ projects/ policies etc., TEC seeks to attract young talent from the fields of ICT through an internship programme. Internship Programme will allow young talent to be

associated with the TEC work for mutual benefit. It will enable TEC to interact with young scholars and to get fresh ideas and study/ research support from the field of academics. At the same time, it will provide an opportunity to young scholars to contribute in the TEC work and have an insight into the related technical work.

2.0 ELIGIBILITY:

- 2.1 Indian students from recognized universities in India or abroad, studying in 3rd/ 4th year (Final or pre-final year) in Bachelor Degree course in Electronics/ Communications/ Telecommunication/ Radio/ Information Technology/ Computers / Electrical Engineering or related discipline and secured minimum 60% marks.

or

who have completed Bachelor Degree course in Electronics/ Communications/ Telecommunication/ Radio/ Information Technology/ Computers/ Electrical Engineering or related discipline course in last one year with minimum 60% marks.

or

who have completed Post Graduate/ Master Degree course in Electronics/ Communications/ Telecommunication/ Radio/ Information Technology/ Computers/ Electrical Engineering or related discipline course in last one year, with minimum 60% marks.

- 2.2 The qualifications may be relaxed in deserving cases based on the needs of the TEC, on the recommendations of Selection Committee and approval of Head of TEC.
- 2.3 Possessing minimum qualifications as above shall not guarantee Internship in TEC. Candidates having exposure in the area of intended internship with good academic background and having higher qualification, based on need shall be given preference.

3.0 DURATION OF INTERNSHIP:

- 3.1 The minimum duration of internship shall be of six months, extendable up to maximum of twelve months.

3.2 Extension beyond six months shall be permitted, on the application of intern duly recommended by the concerned Head of Division and with the approval of the Head of TEC.

4.0 HOW TO APPLY:

4.1 Interested and eligible candidates must send their applications by post along with their CVs, areas of work interest in the prescribed application form (Attached as at Annexure-II) to designated office of TEC, in response to advertisement/ notification from TEC. These applications need to be recommended by the Institution in which the applicant is currently studying.

5.0 SELECTION:

5.1 After the preliminary scrutiny regarding eligibility, the applications of shortlisted candidates will be placed before the selection committee. Selection Committee will be constituted with the approval of Head of TEC consisting of three DDsG/ Directors.

5.2 The selection committee may conduct personal or telephonic interview, if required. No TA / DA shall be paid to candidates for attending the personal interview.

5.3 TEC can also identify interns for specific work domain/ area after interaction with academic institutions.

5.4 Depending upon the number of applications received, TEC may shortlist the applications, limit the number of applicants to be called for a particular period and to decide about the mode of screening thereof.

5.5 If the applicant is pursuing study at any institution then Applicant shall be required to produce a letter from their Supervisor/Head of Department/Institution, indicating his/her status in the Institution and "No Objection" for allowing the student to undergo Internship programme for the period for which he or she is selected before joining.

5.6 The internship is neither a job nor an assurance of a job with the TEC.

6.0 PLACEMENT:

6.1 The interns would be attached with one of the officers in the Divisions of the TEC.

6.2 An orientation workshop will be held for interns at the beginning of the internship. The work of interns will be monitored through periodic interaction with the interns.

6.3 The attendance record and the details of work supervision shall be maintained by the Divisions/Units in TEC.

7.0 LOGISTICS & SUPPORT:

7.1 Interns will be required to have their own laptops. TEC shall provide them working space, workplace Internet facility and other necessities as deemed fit by the concerned Head of Division.

8.0 CODE OF CONDUCT:

8.1 The Intern engaged by the TEC shall observe the following Code of Conduct, which shall include but will not be limited to, the following:

8.1.1 The Intern shall follow the rules and regulations of the TEC.

8.1.2 The Intern shall not reveal to any person or organization confidential information pertaining to TEC/DoT, its work and its policies.

8.1.3 Interns may, with the prior permission of the TEC, present their work to academic bodies and at seminars and conferences. However, even for this purpose information that is confidential to the TEC cannot be revealed under any circumstances.

8.1.4 Any papers and documents written and/or published by the Intern should carry the caveat that the views are the personal views of the Intern and do not represent or reflect the views of the TEC.

8.1.5 Interns will follow the advice given to them by the TEC regarding representations to third parties.

8.1.6 In general an Intern may not interact with or represent the TEC vis-à-vis third parties. However, some Interns may specifically be authorized to interact with third parties on behalf of the TEC depending on the nature of their work areas.

8.1.7 No Intern shall interact with or represent the TEC to the media (print and/or electronic) including social media including facebook/ twitter handles etc.

- 8.1.8 Interns will conduct themselves professionally in their relationship with the TEC and the public in general.
- 8.1.9 It may be strictly observed that the conduct of the interns and their access to the data shall be the sole responsibility of the concerned Division.
- 8.1.10 Any work done for TEC by the intern during the period of Internship will be the sole property of the TEC and TEC reserves the right to use any such work for its own purpose. The intern is barred from claiming intellectual property rights on the work done in TEC during the period of internship.

9.0 SUBMISSION OF PAPER:

- 9.1 Work plans and work schedules shall be developed by the supervisor and the Interns shall invariably adhere to the same.
- 9.2 The interns will be required to submit a Report/Paper on the work undertaken at the end of the internship to the respective Division. The Report shall be signed by the concerned Officer with whom intern is attached, as an acceptance of successful completion of Internship.

10.0 TOKEN REMUNERATION:

- 10.1 Every Intern will be paid a token remuneration @ Rs. 15,000/- per month on pro-rata basis.
- 10.2 The remuneration shall be paid after completion of the month subject to satisfactory progress of work duly accepted by concerned division.

11.0 CERTIFICATE OF INTERNSHIP:

- 11.1 On successful completion of Internship and submission of Report duly signed and accepted by the competent authority as stated above in Para 9.2, a Certificate shall be issued by the concerned Division in the format as available at Annexure-III.

12. DISENGAGEMENT:

- 12.1 The TEC reserves the right to disengage any intern at any point of time from the Internship without assigning any reason.

- 12.3 If the Intern decides to disengage from the TEC, he should provide 4 weeks' prior notice. Notice period may be waived from time to time by the supervisor depending on the role of the Intern.
- 12.4 Upon disengagement, the Intern must hand over to the TEC, any papers, equipment or other assets which might have been given to the Intern by the TEC in course of his work with the TEC. This will include any badges or ID Cards which may have been issued to the Intern.
- 12.5 If it comes to the notice of the TEC that the Intern who has been disengaged by the TEC continues to act in a manner which gives an impression that he is still engaged for the TEC, the TEC shall be free to take appropriate legal action against such intern.

13.0 NUMBER OF INTERNS:

- 13.1 Engagement of interns will be done twice in a calendar year, in synchronization with academic calendar of educational institutes.
- 13.2 TEC will assess the requirement of the interns periodically. Present requirement is given at Annexure-IV.
- 13.3 The total number of interns engaged shall not exceed 25, at any point of time.

14.0 SCHEME REVIEW:

- 14.1 TEC reserves the right to review the scheme at any time. The Scheme so reviewed will be placed on the website of TEC.

15.0 POWER TO REMOVE DIFFICULTIES:

- 15.1 Head of TEC or his appointed/nominated representative shall have the power to remove any difficulty in the way of the implementation of this scheme.

(..... Singh.....)

Deputy Director General / Director (Personnel)

उप महाप्रदेशक (पी एन डी) / DDG (P&T)
दूरसंचार अभियांत्रिकी केंद्र
Telecommunication Engineering Centre
दूरसंचार विभाग / Department of Telecommunications
कुरीयद लाल भवन, जनपथ, नई दिल्ली-110001
K.L. Bhawan, Janpath, New Delhi-110001

ANNEXURE-I**LIST OF TECHNICAL DIVISIONS AND THEIR WORK AREAS**

Sl. No.	Division	Work Areas
1.	Fixed Access (FA)	Fixed Access Technology, Reduction of Carbon foot print, E-waste, Energy Efficiency & Green Telecom etc.
2.	Future Networks (FN)	Future Network & Technology Development, Broadband Network Policy Initiatives & Technology Solutions, Preferential Market Access (PMA) methodology etc.
3.	Information Technologies (IT)	IPv6 implementation, Standardization of IT equipment & Services etc.
4.	Internet of Things (IoT)	Internet of Things (IOT)/ Machine to Machine (M2M) communications, Study and standardization of M2M Gateway and Architecture, Smart Power, Smart Automotive, Smart Health, Smart Safety and Surveillance solutions etc.
5.	Mobile Technologies (MT)	5G, LTE-Advance, LTE, WCDMA (including HSDPA, HSUPA, HSPA, HSPA+ etc.), CDMA 2000 1X, WIMAX, Numbering Plan etc.
6.	Next Generation Switching (NGS)	TDM & NGN based switching technologies, Media Gateways, Centralized Monitoring System, PSTN Lawful interception, Routing & Signalling Plans etc.
7.	Radio (R)	Terrestrial Radio-communication, Ground Equipment for Satellite Communication, Wi-Fi Systems, Spectrum, Radio wave propagation Studies, EMF Exposure measurement framework, Disaster Management, Safety, Environment and EMI/EMC standards etc.
8.	Smart Networks (SN)	Study and standardization of M2M domain Security, Smart Cities, Smart Homes, Smart villages and Agriculture, Smart Environment (Environment monitoring and Pollution Control), Smart Governance etc.
9.	Standardization (S)	Standardization in ICT, Cross-sector standardization co-ordination etc.
10.	Transmission (T)	Optical Transport and Optical Fiber Cables/systems, Transmission synchronization equipment etc.
11.	Telecom Certification (TC)	Implementation of Mandatory Testing and Certification of Telecommunication Equipment (MTCTE) framework, Development and administration of MTCTE portal, Type approval & Interface Approval Certification, Co-ordination with stakeholders etc.
12.	Telecom Security (TS) & Cyber Security (CS)	NGN transport lab, IPv6 Ready Logo approved lab, IPv6 Conformance and interoperability testing, Setting up Telecom Security Test Lab etc. Contribution in Defining the Security indexing guidelines for telecom equipment, Defining security auditing guidelines specific to telecom Service providers etc.
13.	Access Lab	Setting up Access Lab
14.	CPE & TL	Setting up Customer Premises Equipment & Terminal Lab (CPE&TL)
15.	Control Lab	Setting up Control Lab
16.	Green Passport Lab	Setting up Green Passport Lab
17.	Mutual Recognition Agreements (MRA)	Mutual Recognition Agreements, Designation of Conformity Assessment Bodies (CABs) and Certification Bodies (CBs) etc.
18.	Regional TEC offices	Testing of telecommunication equipment/ systems/ services etc.

ANNEXURE-II

APPLICATION FORM FOR INTERNSHIP WITH TEC

1. Name of the Applicant (Mrs. /Ms. /Mr.):

2. Date of Birth:

3. Full Postal Address for Communication:

(Latest
passport Size
photograph of
the applicant)

4. E-mail Id:

5. Mobile No.:

6. Area of interest:

7. Educational Qualification:

Examination	University/ Board	Institute/ Board	Year of passing	Percentage/ CGPA	Subjects
12 th					
Bachelor Degree in Engineering/ Technology	1 st Year				
	2 nd Year				
	3 rd Year				
	4 th year				
Post-Graduate Degree in Engineering/ Technology					
Any other					

8. Studying at present (Details):

(i) Name of Institution:

(ii) Degree along with branch/specialization:

9. Projects undertaken/ papers presented/published:

10. Specific Area(s) of work for the internship in order of priority:

- (i)
- (ii)
- (iii)

11. Any other relevant information/achievement (extra sheets may be annexed, if required):

I certify that the above information furnished by me is true to the best of my knowledge and belief. I also agree that in the event of any misrepresentation and/or falsification of information, my internship shall be liable for termination without notice and without prejudice to any other administrative/legal proceedings that TEC may deem fit to initiate.

(Signature of the Applicant)

Place:

Date:

Name:

RECOMMENDATION OF INSTITUTE

This is to certify that the information furnished by Ms./ Mrs./ Mr.....
....., in the application form above is correct to the best of my knowledge.

I/We recommend for consideration of application for internship in TEC.

Date:

Authorized signatory

Name & Designation

Seal of Institution:

ANNEXURE-III

FORMAT OF INTERNSHIP COMPLETION CERTIFICATE

(To be given on Letter Head)

No.

Dated :.....

INTERNSHIP COMPLETION CERTIFICATE

This is to certify that Ms./Mrs./Mr.
recommended by University/Institute has
successfully completed his/her Internship with Telecommunication Engineering
Centre (TEC), Department of Telecommunications, Ministry of
Communications, Government of India from to During
the period of Internship he/she worked under in the
following areas:-

.....
.....

2. He/ She has shown special flair for
and his/her performance in preparation of the report has been rated as
.....

3. I wish him/her every success in his/ her future endeavor.

(Signature)

Head of Division

ANNEXURE-IV

ASSESSMENT OF DIVISION-WISE REQUIREMENT OF INTERNS

Sl. No.	Division	Interns
1.	Fixed Access (FA)	1
2.	Future Networks (FN)	2
3.	Information Technologies (IT)	2
4.	Internet of Things (IoT)	2
5.	Mobile Technologies (MT)	2
6.	Next Generation Switching (NGS)	1
7.	Radio (R)	2
8.	Smart Networks (SN)	1
9.	Standardization (S)	1
10.	Transmission (T)	1
11.	Telecom Certification (TC)	2
12.	Telecom Security (TS)	2
13.	Mutual Recognition Agreements (MRA)	1
14.	RTEC (East) Kolkata	1
15.	RTEC (North) New Delhi	1
16.	RTEC (South) Bengaluru	1
17.	RTEC (West) Mumbai	1
	TOTAL	24
		(Say 25)