No. 52-1/2021-Trg Government of India Department of Telecommunications 213, MTNL Building, Old Minto Road, New Delhi-110002 (Training & Capacity Building Division)

Dated: 21st Jan, 2021

OFFICE MEMORANDUM

Subject: "5G Specifications" – A semester long online training programme being conducted by IIT Madras from 1st week of Feb, 2021– calling of nominations for.

IIT Madras is conducting a course on 5G Specification this semester which is envisaged to start from 1st week of February (1-4 Feb 2021) and will be conducted online. This will be a semester long course that will cover the topics given below:

- 1. Basic introduction to OFDM and wireless communication
- 2. Frame structure of 5G and different numerology
- 3. Downlink
 - a. SSBlock (Sync channel)
 - b. PDSCH (Data channel)
 - c. PDCCH (Control Channel and DCI formats)
 - d. Pilot structures
- 4. Uplink
 - a. PRACH (Random Access)
 - b. PUSCH
 - c. PUCCH
 - d. Pilot structures
- 5. Forward error correction codes (Rate matching, LDPC)
- 6. TDD formats
- 7. MIMO in 5G NR
- 8. Power control
- 9. RF specifications

2. The proposed course is a semester long course and will be done at a leisurely pace, meeting two or three times a week for about 15 consecutive weeks, providing opportunities for carrying out individual or group assignments and generating an appreciation for the course material.

3. Nomination of eligible Dot officers are invited for the above course. Further details of the program are as under: -

Name of the Course	5G Specifications
Duration / Dates	Semester long (meeting two or three times online a week for about 15 consecutive weeks) starting from 1 st Week of Feb 2021
Location	Online by IIT Madras
Eligibility	ADET and ADG (of DoT Hq and LSAs)
	Upto Director (for NTIPRIT)

Total Seats	25 (3-4 from NTIPRIT, rest from DoT Hq and LSAs)
Last date of receipt of nomination in DoT through proper channel Fees	Wednesday, 27 th Jan 2021 7500/- per participants (Sponsored by DoT)

4. The course needs to be completed while being on the job and no separate leave/work from home will be allowed to finish this course.

How to Apply:

5. Interested eligible officers are requested to submit the proforma attached as Annex-I to this office. Application proforma may be sent by by e-mail (to $\underline{dirtrg-dot@nic.in}$) and (cc to $\underline{adg.trg-dot@gov.in}$ and $\underline{ashish.kushwaha@gov.in}$) to this office by the date mentioned above for necessary approval.

Dilata 21/1/2021

(DEVENDRA TADAY) निदेशक (प्रशिक्षण) Director (Training) दूरसंचार विभाग, भारत सरकार Deptt. of Telecom, Govt. of India नई दिल्ली / New Delhi

(Devendra Yadav) Director (Training-I) (देवेन्द्र यादव) (DEVENDRA YADAV)

Copy:

Posted only on DoT website

Proforma for sending Nomination

Name of the Course	5G Specifications
Duration:	Semester long (meeting two or three times a week for about 15
	consecutive weeks) starting from 1 st Week of Feb 2021
Location	Online
Conducted by	IIT Madras

A. Details of training program

B. Details of officer being nominated

Name of officer	
Designation & Office	
Staff No.	
Date of birth	
Email ID	
Phone number	
(Office & mobile)	
Office Address	

(Name & Signature of the officer)

Date: Place:

C. Details of controlling officer

Name of controlling officer	
Designation & Office	
Email ID	
Staff No.	
Phone number (Office &	
mobile)	
Office Address	

(Name & Signature of the controlling officer)

Date: Place: