



“Towards Global Technological Excellence”
GOVERNMENT COLLEGE OF ENGINEERING, AMRAVATI
(An Autonomous Institute of Government of Maharashtra)
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No. GCoEA/E&Tc/Enquiry/2023-24/ 2257

Date: 8/6/2023

TO,

M/S-----

-----List is attached herewith-----

Subject: - Quotation for the workshop on **“Design, Fabrication and Field Testing of outdoor Antennas and Radar Equipments”** in the Department of Electronics Engineering at **Government College of Engineering, Amravati.**

Dear Sir,

Hereby quotations with lowest reasonable rates for the following training content are being called; send your quotation in the sealed cover to reach the undersigned on or before **20/06/2023.**

Sr. No.	Content	Details
1.	Training Title	Workshop on ‘Design, Fabrication and Field Testing of outdoor Antennas and Radar Equipments’
2.	Training Venue	College premises
3.	Training Duration	3 days
4.	Training Material	Training Material should be handover to the participants on the commencement of the training
5.	Training Certificate	Certificate for all the participants
6.	Target Participant	Final Year B. Tech. (75 students)
7.	Training Objectives	a. Motivate towards core telecom & surveillance based technology through handling of raw material, equipments, outdoor field measurements b. Helps for rapid design manufacturing & measurement cycle c. Microwave Equipment handling d. Data set collection for algorithm development
8.	Material required for the workshop	Hardware or material required for fabrication of antennas must be provided by the suppliers to workshop participants.

9.	Training Syllabus	<ul style="list-style-type: none"> • Antenna design ,link budget, polar plot interpretation • Spectrum measurement, interference measurement, Jamming Technique , beam forming • Hands on practice for RADAR (on the spot RADAR system by participant) • Hands on practice for wire antenna design manufacturing. • Outdoor RF Field mapping Spectrum measurement & survey software(open AREA TEST) • Hands on practice for Outdoor RF link (2KM in campus) • Underwater antenna & MP3 file transmission in water • Radar system and its mathematics • Radar Emulator with various environmental conditions.
10.	Detailed Training contents	<ul style="list-style-type: none"> • Antenna design Methodology, Comparison of Antenna design software, • Design of Reflector antenna, PICO Cell antenna, Flexible microstrip, LOOP Antenna, Yagi antenna, • Fabrication of Reflector antenna, PICO Cell antenna, Flexible microstrip, LOOP Antenna, Yagi antenna, • Primary Radar in Air Traffic Management, Marine Radar Emulator, Over-The-Horizon Radars' Classification of Radar Sets, Tracking Radar Antenna, • Hand-on X BAND marine radar & PPI COKPIT RADAR emulator • Spectrum measurement, interference measurement Noise measurement using FFT • Hand-on session on Signal Analyser. Measurement of analog signal parameters, digital signal parameters, leakage radiation parameters, • Underwater submersible electronics ,Acoustic transmission using water channel ,Design & estimation , role of MATLAB • Hydro acoustic & MATLAB processing, Bathometry, Passive sonar & its signal processing, Active SONAR, • RF Survey technique, Role of GPS and mapping software, • Deployment of antenna link from collage to Highway, On vehicle OPEN AREA TEST data capturing, EIRP Variation using spectrum analyzer, EIRP VS Polarization, EIRP VS TWO antenna placement, ACPR measurement.

Note:

- The dispatch number of this office i.e. outward number of the quotation call letter, the name of the department for which the quotation is desired and the heading "Quotation for the training of _____", should necessarily be superscribed on the main envelope.

TERMS & CONDITIONS

It is proposed to have a Two Envelops System for this Quotation: Envelops should be sealed with a mention of the type of envelop (Technical / Financial) and the outward number of the quotation call letter. These two envelops should be sealed in a third (main) envelop, as mentioned above.


Technical envelop – Cover should contain Technical specifications document.

- A) **Covering letter** for the quotation on the letter head of the supplier.
- B) **Establishment certificate** must be enclosed.
- C) **ST/CST/VAT/GST registration certificate** along with respective **clearance certificate** for the assessment year is also necessary.
- D) **No-Deviation Statement:** No-Deviation statement for specification of the Training offered giving details of specifications in following pro-forma only (No other format will be accepted).

Supplier must fill the specified pro-forma and mere certifying that 'There is no deviation between Enquiry specifications and specifications quoted by the bidder' is not acceptable and such quotations are likely to be rejected.

(2) **Commercial envelop** – Cover should contain price quote document.

- A) **Validity:** The rates offered should be valid till 31/03/2024.
- B) **Price:** F.O.R. destination at Government College of Engineering, Amravati. The offer should be firm, inclusive of all taxes. No extra charges will be paid. If needed, taxes, duties, charges etc. should be clearly mentioned.
- C) **Payment:** 100% against satisfactory completion of training.
- D) **Training material** should be supplied at the time of training free of cost.
- E) The undersigned reserves the right to accept or reject any offer or all offers without assigning any reason thereof.
- F) The undersigned shall not incur any liability to pay interest for delay in payment of bills for any reasons what so ever.


Principal

Government College of Engineering, Amravati

Proforma of No-Deviation Certificate

Name of the Supplier:

Specification of Training stated in Enquiry step by step as per specifications mentioned in document	Specification of Training offered by the supplier step by step	Whether there are deviation from the tender specification, Yes / No	If yes, indicate clearly which the deviations are
1	2	3	4
Specification detail 1,			
Specification detail 2...			
etc.			

Signature of Supplier with Seal

