



“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/ 2258

Date: 8/6/2023

To,
M/S-----
-----List is attached herewith-----

Subject: - Quotation for the Hands-on training on “**Basic Electronics**” 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	Hands-on training on “ Basic Electronics ”
2.	Training Venue	College premises
3.	Training Duration	04 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.	Training Objectives	a. To learn fundamentals of Electronics. b. To perform various experiments on RLC circuits, diodes and transistors, c. To study various sensors and transducers. d. To work with motors and their drives applications. e. To learn PCB designing
7.	Target Participant	Second Year B. Tech. (70 -80 students)
8.	Detailed contents	Fundamentals of Electricity & Electronics: <ul style="list-style-type: none">• Electronic Components (Resistors, Capacitors, Inductors)• Identification of Values of R, L & C, Colour

Coding technique, Wires/Cables

- Relation between Wire Gauge & Area (Cross-sectional Area / Thickness)
- Hands-on Practical / Experimentation using Various R, L, C Components
- Hands-on Experiments demonstrating the Terms: Measurements of Voltage (AC/DC), Current (AC/DC) etc.
- Concept of Electrical Power, Electrical Energy etc.
- Using Breadboard, Digital Multimeter, Handling Electrical Tools.

Various Basic Experiments / Applications of RLC Circuits:

- Electrical Lead & Lag Networks using L C Components,
- Phasor Relationship of RLC Elements
- Experiments on Oscillator Circuits / Tank Circuits using RLC Elements
- Hands-on Experiments demonstrating the Terms, Frequency, Pulse Width, Duty Cycle etc., Operating DSO / CRO.

Electronic Devices & its Applications Diode, Transistor (BJT), FET / MOSFET, ZENER etc.:

- Hands-on Experiments on PN Junction Diodes, Zener Diodes, Small Signal Transistors, MOSFETs, Power Transistors etc.

Display Devices & its Applications:

- Hands-on Experiments on Various LEDs, Multi-color LEDs, 7 Segment LED Displays (CA & CC), Alphanumeric LCD Displays (1L, 2L), OLED Displays

Designing PCB using above basic components

Sensors & Transducers and Applications:

- Hands-on Experiments on Various sensors such as Temperature Sensors, Humidity Sensors, Liquid Level Sensors, Infrared Sensors (Trans-Receiver Type), Photo-Sensors (In Visible Spectrum – LDR), Ultrasonic Sensors, Motion Sensors, Moisture Sensors, Gas Sensors, Pressure Sensors, Opto-isolators

Motors & Applications:

- Hands-on Experiments on DC Geared Motors,

		DC Stepper Motors, DC Servo Motors & its Drivers • Hands-on Experiments on 1 Ph. AC Motor
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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 Specifications – 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 Quotation** – 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

2018

Prforma 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

[Signature]