





Date: 26.01.2022

STRATEGIC COMMUNICATION AND UNMANNED SYSTEMS SBU, BENGALURU COMPLEX.

Advertisement No.383/HR/SE/SC&US/2021-22

Bharat Electronics Limited a Navartna Company and India's premier professional electronics Company under the Ministry of Defence, requires the following personnel *on permanent basis* for its Strategic Communication and Unmanned Systems SBU, Bengaluru Complex.

| Sl. No. | Post | Qualification / Discipline | Reservation | District / State (Place of posting) | Upper Age Limit (as on 01.01.2022) | No. of Posts | Pay scale |
|------------|-----------|---|---------------------------------------|-------------------------------------|---|--------------------|---|
| 1 | E- III | BE/B. Tech in Electronics/Electronics & Communication/Electronics & Telecommunication/ Telecommunication/ Communication | UR - 2 OBC - 2 SC - 1 ST - 1 | Bengaluru | 32 years | 4 | 50000- 3%- 160000 + other admissible allowances |
| 2 | | BE/B. Tech in Mechanical | ST - 1 | 1 | | 2 | |

^{*}Note: Number of vacancies may be increased or decreased based on the actual requirement at the discretion of the Management.

Candidates who are desirous of applying for the post should be willing to relocate to the place mentioned above and should also be willing to travel extensively across the country.

1.0 ESSENTIAL QUALIFICATION:

Full time B.E/B.Tech. in Electronics/ Electronics & Communication/ Electronics & Telecommunication/ Telecommunication/ Communication/ Mechanical.

Candidates who have done their **AMIE/GIETE** are also eligible to apply.

2.0 PERCENTAGE OF MARKS/CLASS

First Class for General/OBC/EWS candidates and Pass Class for SC/ST/PWD (Person with Benchmark Disability) candidates from an AICTE approved College/Institute or a recognized University.

3.0 **AGE**:

The upper age limit indicated above in the table is for candidates belonging to General category. The upper age limit will be relaxed by 3 years for OBC candidates, 5 years for SC/ST and 10 years for PWD candidates (having minimum 40% disability, in addition to the relaxation applicable to OBC/SC/ST candidates).







4.0 RELEVANT POST QUALIFICATION EXPERIENCE (AS ON 01.01.2022):

A) <u>ELECTRONICS (2 Posts)</u>

Candidate should have working level knowledge of following technologies for **minimum 4 Years**. Candidates should have good grasp and be able to learn on the Job. Candidates should willing to travel anywhere in India for testing and field trials.

Essential Skills:

- Should have FPGA programming (RTL Design) skills in Verilog / System Verilog / VHDL.
- Requirement creation and Architecture design experience in Digital HW domain.
- Knowledge and experience in RF-Wireless communication system development with ADCs, DACs, and implementation of DSP function / Digital Filters in FPGA.
- Should have the experience of Design, debug and test Printed Circuit Boards containing Digital circuit, Microprocessors, Ethernet Controllers, FPGA and RF circuits

Desired Skills:

- Should have the knowledge of interfacing the standard interfaces such as I2C, SPI, USB and Ethernet along with use of External memory interfacing High speed serial interfaces with FPGA.
- Should have experience in integrating procured or custom IP Cores in overall FPGA design architecture.
- Embedded HW & SW integration experience in Real time operating system environment.
- Experience in optimizing the segmentation of the design for target FPGA, Designing Modem algorithms in FPGA is preferable.
- Should have working experience with Matlab for communication system design and simulation.
- Should be familiar with SDK of FPGA and C / C++ programming language.
- Should have creative thinking and good mathematical skills

B) <u>ELECTRONICS (2 Posts)</u>

Candidate should have working level knowledge of following technologies for **minimum 4 Years.** Candidates should have good grasp and be able to learn on the Job. Candidates should willing to travel anywhere in India for testing and field trials.

Essential Skills:

- Should have the work experience of Embedded C and C++, Microcontroller, and Microprocessor.
- Should have understanding and experience in embedded system design patterns. Should have knowledge of reading the schematic and datasheet of components.
- Experience of microcontroller peripherals and interfaces like UART/ SPI/ I2C/ADC/DAC/PWM / GPIOs / CAN bus / Ethercat.
- Should have experience in Real time OS coding techniques and IP protocols.
- Experience of embedded Linux, RTOS, ARM processor along with Device driver.







Desired Skills:

- Knowledge and experience of usage of Hardware test equipment like oscilloscope and logic analyzer.
- Knowledge of fundamental of Analog and Digital electronics and Electronics component is preferred.
- Should have very good debugging skills with ability to work with existing codebases.
- Should be familiar with any one of the scripting languages like Python, Perl and TCL.

C) MECHANICAL (2 Posts)

Should have a **minimum of 4 Years** experience in design, development & FE Analysis. Preferably, in the areas of Electronic products & systems for Aerospace & Defense/ medical equipments/ Robotics/Special purpose machines/ electro-mechanical systems.

Essential Skills:

- Should have in-depth working knowledge in MCAD tools such as AUTOCAD, SOLIDWORKS / AUTODESK INVENTOR & CAE Tools such as ANSYS, NASTRAN.
- Should be able to execute mechanical engineering design right from capturing customer requirements, translating them to specifications and generating detailed designs.
- Should have the ability to develop conceptual designs & engineering drawings with little or No supervision.
- Should have the ability to verify the designs with engineering calculations.
- Should have the ability to create detailed drawings for getting parts and assemblies manufactured from vendors.
- Should have the ability to select the required electro-mechanical hardware to be used in the systems/product and vendor development.
- Should have knowledge in selection of appropriate raw materials based on the Application, environment, Cost & availability.
- Should have In-depth Knowledge of manufacturing processes such as sheet metal forming, precision machining, 3D printing, precision casting processes, plastics & Carbon/Glass fibre composite moulding & Metal joining processes.

Desired Skills:

- Should have the ability to apply GD&T in precision engineering drawings
- Should have knowledge of Environmental qualification tests for products.
- Should have the knowledge in the application of hydraulics & pneumatics.
- Should have ability to select the surface treatment processes considering the environment in which the product/system is used.
- Should have the ability to use DFX in designs with due consideration for cost.
- Should have knowledge on water proof & EMI/EMC Shielded Enclosure designs.
- Should have awareness about Human engineering and aesthetics in product design.
- Should have the ability to develop engineering mechanisms involving gears, pulleys, sprockets, racks, cams, power screws, gear boxed & Motors.
- Should have excellent written & oral communication skills.
- Exposure to SAP PLM Module & Engineering documentation system preferred.
- Exposure to Thermal management, Air-conditioning & DG Sets preferred.







5.0 METHOD OF SELECTION:

Selection will be through a Written Test for shortlisted candidates, followed by an Interview, **The details of the Written Test/Interview will be intimated in due course.** The written test Centre will in Bangalore.

6.0 FEE PAYMENT

Candidates are required to remit an amount of Rs. 750/- (including 18% GST) towards application fee through SBI Collect (through online mode or through SBI Branch). SC/ST/PWD candidates are exempted to pay the application fees.

- The application fee should be remitted through SBI Collect (through online mode or through SBI Branch).
- Candidates are requested to read the details and screenshots for making the payment.
- Candidates can also make the payment by approaching SBI branch. You have to select SBI branch in the payment option and download pre-printed challan generated through SBI Collect and deposit the application fee (as applicable) plus applicable bank charges in any SBI Branch. The candidate should ensure to obtain the seal and signature of the bank official.
- Candidates have to enter the "SBI Collect reference No." generated after payment, in the online Application Form.
- Candidates may go through all instructions and eligibility criteria carefully before remitting Application Fee and submitting the application. Fee once paid will not be refunded.

7.0 GENERAL INSTRUCTIONS:

The Cut-off date for deciding the maximum permissible age and experience (Post Qualification Experience) shall be 01.01.2022. In order to compute post-qualification work experience, the period of work experience starting from the month immediately succeeding the month of final examination in which candidate acquire the essential educational qualification shall be considered.

Candidates working in PSUs/Government/Quasi Government organizations shall produce No Objection Certificate at the time of the interview. Such candidates, who are unable to produce NOC at the time of interview, will not be interviewed.

Candidates are required to travel extensively anywhere in India.

In addition to Basic Pay, other allowances like Dearness Allowance, House Rent Allowance, 35% of the Basic Pay as perquisites, Performance Related Pay (PRP), Group Insurance, Medical facilities and Provident Fund as per the Company's rules will be part of the remuneration package.

Request for change of category once declared in the application will not be entertained.







The exact date and time shall be communicated in the Admit Card for Written Test. Candidates are required to possess at least one valid e-mail id which is to be entered in the application form. Information pertaining to the Written Test/Interview will be sent by e-mail to the id that is furnished and also will be published in the BEL Website. BEL will not be responsible for bouncing of any e-mail sent to the candidate.

In the event any applicant has litigated with his/her employer in the past, the same should be clearly mentioned in brief.

The SC/ST/OBC/Disability Certificates should be strictly in the format available on the BEL website.

Canvassing in any form will result in disqualification.

Only Indian nationals need to apply.

Merely fulfilling the minimum requirement of qualification and experience will not vest any right on the candidates to be called for the Interview/Written Test. BEL reserves the right to debar/disqualify any candidate at any stage of the selection process for any reason whatsoever and also reserves the right to cancel / restrict / enlarge / modify or alter the recruitment or selection process, if need so arise without issuing any further notice or assigning any reason thereafter.

Interested candidates meeting all the criteria mentioned aloft, should submit the application in the format appended to this advertisement and send the applications through post, super scribing on the envelope the post applied for. The photocopies of the following documents should compulsorily be enclosed:

- i) 10th Standard/SSLC marks card/passing certificate (as proof of date of birth).
- ii) All certificates (starting from Matriculation/Class 10th/SSLC) in support of educational qualifications.
- iii) B.E/ B.Tech./AMIE/GIETE Degree certificate (as applicable). In case of CGPA or credits system of assessments, the candidates are required to attach the formula for conversion of CGPA/ Credits to percentage in accordance with the respective University norms.
- iv) All semester Marks Sheets/Final consolidated marks sheet.
- v) Caste/Community/Disability/Income certificate in case of candidates belonging to SC/ST/OBC/PWD respectively. Candidates claiming reservation under any of the above categories are required to submit the certificate in the prescribed format. **The formats of various certificates are provided as link to the advertisement.** Candidates belonging to OBC category should possess the certificate issued on or after 01.09.2020. Candidates belonging to EWS category are required to possess the certificate either for the year 2019-20 or 2020-21.







- vi) Post qualification work experience certificate/s from previous / current employer. Where current employment certificate is not produced, the Offer of appointment of current appointment, Employee ID proof and latest pay slip should compulsorily be enclosed to ascertain the years of post qualification experience.
- vii) Candidates if working in PSUs/ Govt. organizations should compulsorily submit 'No Objection Certificate' at the time of application or interview.
- viii) Copy of the SBI receipt.

Failure to forward the indicated enclosures will result in disqualification, even if the candidates have remitted the application fee. Applications complete in all respects should be sent by **ordinary / speed post to**

Manager HR (SC&US/HLS&SCB), Bharat Electronics Ltd, Jalahalli post, Bengaluru – 560013

Completed application should reach on or before 16.02.2022.

Applications that are incomplete, not in the prescribed format, not legible, without the required enclosures will be summarily rejected without assigning any reasons and no correspondence in this regard will be entertained.

There will be no separate communication to any candidate on their non-selection at any stage. You may write to <a href="https://https:

