

**BHARAT ELECTRONICS LIMITED**  
**NDA Road, Pashan, Pune - 411 021**

Bharat Electronics Limited, a Navaratna category Central Public Sector Enterprise and India's leading professional Electronics Company, under Ministry of Defence, Government of India, requires professionals for the post of Probationary Engineer - 11 Posts on Permanent basis for its Pune Unit.

| S. No. | Post & Grade                 | Post Code | *Discipline  | No. of Posts | Reservation                       | Relevant post-qualification Industrial experience as 01.05.2023  | **Upper age limit as on 01.05.2023 |
|--------|------------------------------|-----------|--|--------------|-----------------------------------|--|------------------------------------|
| 1      | Probationary Engineer (E-II) | E-II      | M. Sc. (Tech)<br>(Photonics / Applied Optics / Optical Engineering)                                  | 02           | UR-03<br>OBC (NCL) - 02<br>ST -01 | NIL  | 25 Years                           |
| 2      |                              |           | M.E/M Tech (Laser/ Opto-Electronics/ Optical Engineering) with BE/ B Tech in Electronics background. | 02           |                                   |  | 27 Years                           |
| 3      |                              |           | M.E/M Tech (Laser/Photonics OptoElectronics/ Optical Engineering) with Physics background            | 02           |                                   |  |                                    |
| 4      | Senior Engineer (E-III)      | E-III     | BE / B. Tech<br>OR<br>ME / M. Tech Electronics   | 02           | UR-03<br>OBC (NCL) - 01<br>ST -01 | 4-5 Years of relevant experience for candidates with BE/ B.Tech. 02 years relevant experience for candidates with ME/ M.Tech | 32 Years                           |
| 5      |                              |           | BE / B. Tech<br>OR<br>ME / M. Tech Mechanical  | 03           |                                   |  |                                    |

\*Candidates whose discipline / specialization mentioned in their relevant degree certificate do not tally with the discipline / specialization prescribed as above will not be considered for selection.

\*\***AGE Relaxation:**The upper age limit will be relaxable for OBC (NCL) candidates by 3 years and for ST candidates by 5 years. For candidates belonging to PwBD category having minimum 40% disability or more will get 10 years relaxation in upper age limit in addition to the relaxation applicable to the categories mentioned above. SC candidates will be considered on par with UR Criteria.

## EDUCATIONAL QUALIFICATION

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### **PROBATIONARY ENGINEERS (E-II)**

**S. No. 1:** Candidates should have completed **M. Sc. (Tech) in Photonics / Applied Optics / Optical Engineering** qualification as per the above table. The prescribed qualification should be acquired from AICTE approved Colleges / Institutions or a UGC recognized University. UR / OBC / EWS candidates should have secured First Class and ST / PwBD candidates should have secured Pass Class. SC candidates will be considered on par with UR Criteria

**S. No. 2:** Candidates should have completed **ME/ M. Tech in Laser / Opto-Electronics /Optical Engineering** qualification as per the above table. The prescribed qualification should be acquired from AICTE approved Colleges/Institutions or a UGC recognized University. UR / OBC / EWS candidates should have secured First Class and ST/PwBD candidates should have secured Pass Class. SC candidates will be considered on par with UR Criteria

Further, preceding **Graduate Degree shall be B.E. / B. Tech in Electronics** with First Class for UR / OBC / EWS candidates and ST/PwBD candidates should have secured Pass Class. SC candidates will be considered on par with UR Criteria

**S. No. 3:** Candidates should have completed **ME/M. Tech in Laser/Photonics Opto Electronics/Optical Engineering** qualification as per the above table. The prescribed qualification should be acquired from AICTE approved Colleges/Institutions or a UGC recognized University. UR / OBC / EWS candidates should have secured First Class and ST/PwBD candidates should have secured Pass Class. SC candidates will be considered on par with UR Criteria

Further, preceding **Degree shall be in Physics background** with First Class for UR / OBC / EWS candidates and ST/PwBD candidates should have secured Pass Class. SC candidates will be considered on par with UR Criteria.

### **SENIOR ENGINEERS (E-III)**

**S. No. 4 (Electronics):** BE / B. Tech/AMIE/GIETE from recognized University / Institution in the relevant disciplines and should have secured First Class

ME / M. Tech from recognized University / Institution in the relevant disciplines and should have secured First Class.

***Approved / Relevant Branches*** - Electronics, Electronics & Communication, Electronics & Telecommunication, Communication, Telecommunication.

**NOTE:** Electrical and Electronics Engineering, Instrumentation Engineering will not be considered relevant.

**S. No. 5 (Mechanical):** BE / B. Tech/ AMIE/GIETE from recognized University / Institution in the relevant disciplines and should have secured First Class.

ME / M. Tech from recognized University / Institution in the relevant disciplines and should have secured First Class.

***Approved Branches*** – Mechanical Engineering.

**NOTE:** Industrial / Production Engineering will not be considered relevant

**IMPORTANT:** The degrees must be recognized by an Indian University (University incorporated by an Act of the Central or State Legislature in India or other Educational Institutions established by an Act of Parliament or declared to be deemed as universities under Section 3 of University Grants Commission Act, 1956).

## REMUNERATION

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### **Probationary Engineer (E-II)**

**"S. No. 1" Post** - Pay Scale Rs. 40,000-3%-1,40,000 at the time of joining. 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, Provident Fund, Pension, Gratuity, as per the Company's rules will be part of the remuneration package.

**"S. No. 2 & 3" Post**- Pay Scale Rs. 40,000-3%-1,40,000 with 02 additional Increments at the time of joining for M.Tech candidates. 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, Provident Fund, Pension, Gratuity, as per the Company's rules will be part of the remuneration package.

**Note :-** Candidates selected as Probationary Engineers will have to execute a service contract to serve the company for a period of three years after successful completion of training period on a non judicial stamp paper.

### **Senior Engineer (E-III)**

**"S. No. 4 & 5" Post** - Pay Scale Rs. 50,000 - 3% - 1,60,000 at the time of joining 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, Provident Fund, Pension, Gratuity, as per the Company's rules will be part of the remuneration package.

## JOB RESPONSIBILITIES

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### **E-II Grade**

#### **"S. No. 1-**

The Candidate is required for the following design and development activities:

1. Design, simulation and analysis of Optical Sub Systems for
  - a. Electro-optical sensors
  - b. Laser Systems
  - c. Fiber optic sensors
2. Development of Products & Systems
  - a. Assembly of Optics, Optomechanical Assemblies & Systems
  - b. Testing of Optical components, Modules & Systems
3. Evolving new processes for Alignment, Assembly & Testing
4. Documentation
5. Activities towards the life cycle support for Products developed

#### **"S. No. 2" Post -**

The candidate is required for the following Design & Development activities:

1. Design, Simulations, Analysis for
  - a. Laser Systems
  - b. Fiber lasers
  - c. Electro-optical sensors
  - d. System Electronics

- a. Assembly of Laser, Fiber optic Assemblies & Systems
  - b. Testing of Laser, fiber optics, Optoelectronics, Electro-optics components, sub Assemblies & Systems
3. Evolving new processes for Alignment, Assembly & Testing
  4. Activities towards the life cycle support for Products developed.

### **“S. No. 3” –01 Post (D&E)**

The Candidate is required for the following Design & Development activities

1. Designs & Analysis for
  - a. Laser Resonators of Laser Systems
  - b. Laser /Optics for Electro-optical sensors
  - c. Optics for Fiber optics sensors
  - d. System Design
2. Development of Products & Systems
  - a. Assembly of Laser, Fiber optic Assemblies & Systems
  - b. Testing of Laser, Optoelectronics, Electro-optics components, sub Assemblies & Systems
3. Evolving new processes for Alignment, Assembly & Testing
4. Documentation
5. Activities towards the life cycle support for Products developed

### **“S. No. 3” –01 Post (Production)**

1. Operational hazard of Class IV Laser burning with laser as per American standard ANSI: Z 136
2. Act as Safety Officer & Trained Laser User. Giving operational clearance for Laser Safety in areas of Laser Transmitter Testing, Integration and Final Assembly Stages. (In-House, Field and Shift Operations)
3. Operate Zygo Interferometer, Beam Profiler, Splitters, and Dumps, PSD Sensors, and Micro Alignment setup.
4. Diffraction limited alignment process and Superimposition of laser over NIR image characterization and calibration of NIR camera.
5. Analyse thermal effects on single mode laser beam parameters. Understand optical degassing, cleaning and burn-in requirements.
6. Understand high quality optical parameters such as surface finish, micro-cleaned optics, reflecting surface, initiation of coating damage. Inspection for micro material damage / loss of material.
7. Thermal Lensing Effects, Surface Stress, assembly and testing of BDOC and visualize optical and laser design.

#### **Desirable Experience -**

- Working on high power laser, installation of high power laser cutting machine.
- Prediction of testing system to avoid laser scattering and reflection.
- High power laser system integration and environmental testing. Laser / Optics fault analysis, cause and effect of laser damage. Analytical inputs to CAPA.

### **Experience - E-III Grade- (Post Qualification- Industrial Experience)**

#### **“S. No. 4” Post – Electronics**

The candidates must have/ had post qualification industrial experience in any one or more of the following:

1. Experience in Electronic Assembly, inspection & testing of Electronic Fuzes or Smart munitions.
2. Experience in designing, testing of RF Antennas, RF PCBs & RF Amplifiers, Working experience in Proximity Sensor systems, Knowledge of software tools like HFSS, ADS, etc, working knowledge of using Test instruments like Spectrum Analyzer, VNA etc.
3. Experience of Embedded system Programming, Knowledge of software like Python, Java Script, C++ etc. with working experience in using Electronics Test instruments (Oscilloscopes, Counters, etc)
4. Knowledge of military design and testing standards like MIL, STANAG, JSS etc and experience of static and dynamic testing of electronic fuzes, smart munitions, missiles etc. will be an added advantage.

### **"S. No. 5" Post – Mechanical**

The Candidates must have/ had post qualification industrial experience in any one or more of the following:

1. Experience of explosive assembly/ inspection/testing in the manufacturing of warheads, SAM's, Electronic Fuzes, propellants and other ammunitions.
2. Designing of ammunition products having experience in design software like Solid Works, Autocad, ANSYS, CFD etc., with knowledge of military design and testing standards like MIL, STANAG, JSS etc
3. Knowledge of/ conversant with explosive safety rules/ regulations for handling, storage, transportation & demolition of explosive items
4. Knowledge on designing and validating the equipments, tools, fixtures and gauges for explosive projects and streamlining the procedures for product realization with safety for R&D and development of explosive sub-systems pertaining to projects.
5. Knowledge of laboratory analysis of explosive chemicals/ experience of static and dynamic testing of electronic fuzes & ammunitions will be an added advantage.

**Note:-** Prior experience as Trainees /Fixed-tenure / Contractual engagement in BEL / other PSUs will not be considered as relevant experience.

Academy/ Teaching/ Apprenticeship Training/ Research work experience will not be considered as relevant post qualification/ industrial experience.

### **MODE OF SELECTION**

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- Selection will be through a written test followed by interview of only those candidates who qualify the written test in the ratio of 1:5.
  - Written Test will consist of objective type questions for 150 marks from Technical domain and General Aptitude.
  - General /OBC/EWS candidates shall secure 35% as qualifying marks and ST/PWBD candidates shall secure 30% as qualifying marks in written test. SC candidates will be considered on par with UR Criteria
- Call letters will be sent to the e-mail IDs of eligible candidates for attending the written test. BEL will not be responsible for bouncing of any e-mail sent to the candidate.
- Date, time and centre details of the written test will be intimated by e-mail in due course.
- Intimation about the Personal Interview will be given to shortlisted candidates in the Interview Call Letter via e-mail only.
- All outstation candidates shortlisted for Interview will be reimbursed with IInd class train fare by the shortest route between the correspondence address and place of interview on production of valid train tickets. There will be no reimbursement of fare for attending the written test.

### **HOW TO APPLY**

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Candidates are required to send hard copy of the duly filled in Application Form, SBI Collect Reference Number Receipt along with the following self-attested photocopies of the documents by Speed Post to **Additional General Manager (HR&A), Bharat Electronics Limited, N.D.A. Road, Pashan, Pune- 411021, Maharashtra** so as to reach it on or before 23.06.2023. Any Hard Copy Application received after 23.06.2023 will not be considered for the selection process.

**IMPORTANT NOTE:** *Envelope shall be Superscribed with Post Code applied for and the senders Name and Mobile Number* and sent to the below mentioned address:

Super-scribed "**Application for the post of Probationary Engineer (Job Code: E-II)**"

Super-scribed "**Application for the post of Senior Engineer (Job Code: E-III)**"

**SENDER's NAME & Mobile Number**

TO

**Additional General Manager (HR&A),  
Bharat Electronics Limited, N.D.A. Road.  
Pashan, Pune- 411021, Maharashtra, India**

- Before applying for the post, the candidates should ensure that he/she fulfills the eligibility criteria mentioned in the advertisement.
- ✚ **Documents to be attached along with Application Hard Copy:**
  - a) Original filled in application form, in the format downloaded from the BEL website.
  - b) Copy of SBI Collect payment receipt.
  - c) Self-Certified photocopies of the following documents:
    - i. Birth date proof – Birth Certificate or Marks Sheet issued by Board for Matriculation with clear mention of Date of Birth on it.
    - ii. Two passport size colour photographs.
    - iii. All certificates (starting from Matriculation / Class X/PUC/ XII class/diploma/ degree) in support of educational qualifications.
    - iv. All Semester Mark sheets of qualifying degree- M. Sc. (Tech) / ME/M. Tech/ BE / B.Tech/ AMIE/ GIETE.
    - v. Qualifying Degree Certificates.
    - vi. All Semester Mark sheets of preceding Graduate Degree i.e. B.E. / B. Tech (Electronics) or M. Sc. (Physics) in case of post mentioned at SL No 2 & 3.
    - vii. B.E. / B. Tech (Electronics) or M. Sc. (Physics) Degree Certificate in case of post mentioned at SL No 2 & 3..
    - viii. Conversion formula certificate for conversion of CGPA / DGPA / OGPA or letter grade to percentage marks & awarded class, duly certified by the University / Institution, wherever applicable.
    - ix. Candidates claiming reservation under any of the categories are required to submit the certificate in the prescribed format.
      - x. A copy of latest OBC certificate with NCL. Non Creamy Layer Certificate for OBC candidates issued on or after 01.05.2022
      - xi. A copy of ST/SC certificate.
      - xii. Disability certificate in the prescribed format, if the candidate belongs to PwBD category.
      - xiii. No objection certificate if employed in Government / Quasi Government and Public Sector undertakings.
      - xiv. Experience certificate from the previous and present employer with clear mention of joining / exit date and job responsibilities held if any. Where current employment certificate is not produced, the joining/ appointment letter, first and latest payslip and employee id proof should be compulsorily attached to determine the number of years of experience.(For post mentioned at Sl 4 & 5).

**The last date for receipt of application is 23.06.2023.**

**APPLICATION FEE**

| Post                            | Application Fee             | Exemption  |
|---------------------------------|-----------------------------|--|
| Probationary Engineer<br>(E-II) | Rs.708/-<br>(Including GST) | <b>Candidates belonging to SC, ST, and PwBD categories are exempted from payment of application fee.</b> |
| Senior Engineer<br>(E-III)      |                             |  |



- The application fee should be remitted through SBI Collect.
- Candidates are requested to read the details and manual provided on the website for making the payment.
- GEN/ EWS/ OBC candidates have to enter “**SBI Collect reference number**” generated after payment in the application form. Please check the link given on the BEL website regarding instructions for making SBI Online payments. SC/ST/ PwBD candidates are exempted from payment of application fee.
- Application fee paid for post advertised by other Units of BEL will not be considered.

1. **Candidates should go through all instructions and eligibility criteria carefully before remitting Application Fee.**
2. **Fee once paid will not be refunded for whatever reason.**
3. **Candidates may take note that no cheque, DD or cash will be accepted towards payment of application fee.**

#### GENERAL CONDITIONS

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- Only Indian nationals need to apply.
- Candidates employed in Govt./Quasi Govt. and Public Sector Undertaking is required to submit the “**No Objection Certificate**” at the time of interview; without which such candidate will not be allowed to appear for the interview.
- The number of posts indicated above may vary based on the actual requirement at the time of selection.
- Applications that are incomplete, without the required/mandatory enclosures will be summarily rejected without assigning any reason and no correspondence in this regard will be entertained. There will be no separate communication to any candidates on their non-consideration at any stage of the selection process.
- The above opening is for Bharat Electronics Limited, NDA Road, Pashan, Pune-411021. However, selected candidate may be required to serve in other location/s also, if need arises, as per Company’s requirement.
- Candidates are required to provide their one valid e-mail ID which shall be entered in the application form. Information pertaining to the Written Test / Interview will be sent to the shortlisted candidates only by e-mail. BEL will not be responsible for bouncing of any e-mail sent to the candidate. All correspondence will be done through e-mail only.
- BEL reserves the right to debar the candidates at any stage of selection process, if the candidature is not found suitable.
- Candidates claiming to be belonging to EWS, SC, ST, OBC, PwBD category are required to submit the latest certificate in the prescribed proforma (available in Company’s website [www.bel-india.in](http://www.bel-india.in)) issued by the prescribed authority along with the application. Certificate in any other proforma or issued by an authority other than the prescribed authority will not be accepted.
- Request for change of category once declared in the application form will not be entertained.
- Candidates belonging to OBC category should produce the certificate dated on or after 01.05.2022 along with Non Creamy Layer Certificate for considering his/her in OBC category.
- Appointment of the provisionally selected candidate will be subject to being found Medically Fit by the Company’s medical authorities as per the medical fitness standards laid down by the Company. The candidate who is called to report on selection should get himself/herself medically examined by a Civil Surgeon/Asst. Civil Surgeon of District Government Hospital and submit the medical report as per the requirement of the Company.
- Candidates with relevant disability of not less than 40% only will be eligible for reservation and relaxation as PwBD. PwBD candidates are required to submit Disability Certificate issued by the Medical

board in the prescribed format (available in Company's website [www.bel-india.in](http://www.bel-india.in)) along with the application.

- In case any University / Institute following an evaluation system of CGPA / DGPA / OGPA or letter grade, the candidate, wherever applicable, it is mandatory for the candidate to submit percentage (%) conversion certificate issued by university / institution and awarded class along with the application.
- The admission at all/any stage of selection process will be purely provisional. Mere issue of admit card/interview call letter/provisional offer of appointment to the candidate will not imply that his/her candidature has been cleared by BEL. BEL reserves the right to debar/ disqualify any candidates at any stage of the selection process for any reason whatsoever. Mere applying for the post shall not be deemed as selection.
- **Canvassing in any form will result in disqualification at any stage of the selection process.**
- Please ensure that the applicant fulfils all the eligibility criteria as stipulated in the advertisement. In case applicant fails to meet any of the eligibility criteria as stated in the advertisement for the post, his/her candidature will be cancelled at any point of selection process. The decision of the management in this regard would be final. Candidate must go through all instructions and eligibility criteria carefully before submission of Application fee. Application Fees once paid will not be refunded in any case/circumstances.
- Decision of BEL on all matters regarding eligibility of candidate, the stages at which such scrutiny of eligibility is to be undertaken, qualification and other eligibility norms will be final and binding on the candidate.
- In the event any candidate has litigated with his/her employer in the past, the same should be clearly mentioned in brief.
- Any revision, clarification, addendum, corrigendum, time extension etc to the above advertisement will be hosted on the career section of BEL Website and no separate notification will be issued in the Press. Candidates are advised to visit the website regularly to keep themselves updated.
- Management reserves the right to increase or decrease the vacancies and also cancel /restrict /enlarge/modify/alter the recruitment /selection process if need so arises, without issuing any further notice or assigning any reason thereafter.

**The last date for receipt of application is 23.06.2023.**