POSITION TITLE: Engineering Assistant I / II / III

JOB LOCATION: Juneau, AK

POSITION DESCRIPTION:
These are Structural Engineering positions in the Statewide Design and Engineering Services division's Bridge Section located in Juneau, Alaska. These are flexibly staffed positions, Engineering Assistant (EA) I, II and III and descriptions are provided below.

EA I: Under immediate supervision of a licensed engineer, performs entry-level structural engineering analysis and calculations for the development of bridge plans, specifications, cost estimates, reports, and load ratings. Applies accepted structural and other civil engineering practices in the layout, design, and analysis of bridges and other transportation structures.

EA II: Under general supervision of a licensed engineer, this level performs basic structural engineering analysis and calculations in the design, repair, construction, inspection, and load rating of bridges and other transportation structures. This position applies accepted structural and other civil engineering practices in evaluating bridge needs and completing bridge layouts, designs, and analysis.

EA III: Under general direction of a licensed engineer this level performs journey-level (sub-professional) structural engineering analysis and calculations in the design, repair, construction, inspection, and load rating of bridges and other transportation structures. This position applies accepted structural and other civil engineering practices in evaluating bridge needs and completing bridge layouts, designs, and analysis. Additionally, prepares details, calculations, quantities, and writes draft construction specifications.

Some of the duties and responsibilities include but are not limited to:
- Analyze, design, and load rate timber, steel, and concrete bridge members
- Check structural and geometric aspects of bridge plans completed by licensed engineers
- Review construction shop drawings and materials certifications
- Assist with federally required bridge inspections
- Assist with office and field work associated with bridge load instrumentation program

Please Note, this position occasionally requires:
- Travel in small aircraft,
- Walking on steep slopes,
- Wading in streams and rivers,
- Performing inspections at heights, and
- Performing inspections in remote areas.

DESIRED QUALIFICATION:
Please address the following in your cover letter:
- Education and/or experience in the engineering fundamentals of structures
• Education and/or experience in most of the following fields:
  • Statics
  • Mechanics
  • Structural analysis
  • Geotechnical and/or foundation engineering
  • Structural steel design
  • Reinforced concrete design
  • Pre-stressed concrete design
  • Timber design
  • Seismic analysis and design of structures
  • Engineering economics
• Familiarity with the AASHTO LRFD Bridge Design Specification
• Familiarity with commercially available structural engineering software
• Strong oral and written communication skills

MINIMUM QUALIFICATION:
In order to be qualified, you must meet the following requirements:

Engineering Assistant I
Bachelor’s degree with a major in engineering, architecture or land surveying from a postsecondary institution accredited by ABET Or: A bachelor’s degree with a major in engineering, architecture or land surveying from a postsecondary institution not accredited by ABET.
AND An Engineer-In-Training (EIT) or Land Surveyor-In-Training (LSIT) certificate issued by a state or the National Council of Examiners for Engineers and Surveyors; or verification of passing the Fundamentals of Engineering (FE) or Fundamentals of Surveying (FS) examination.
Special Note:
An applicant who will obtain within nine months a bachelor’s degree from an institution accredited by ABET, with a major in engineering, architecture or land surveying, will qualify to apply. An applicant qualifying under this option may receive a job offer conditional upon completion of the degree requirement within nine months, and may begin work AFTER obtaining and showing proof of the required degree.
Engineering-In-Training or Flex Engineering Assistant I/Engineering Assistant II positions will be identified by the employing department.

Engineering Assistant II
Bachelor's degree, or the equivalent with a major in engineering, architecture or land surveying from an institution accredited by ABET AND One year of entry level engineering, architectural or land surveying experience as an Engineering Assistant I with the State of Alaska or the equivalent elsewhere.
OR A bachelor's degree with a major in engineering, architecture or land surveying from an institution not accredited by ABET AND An Engineer-In-Training (EIT) or Land Surveyor-In-Training (LSIT) certificate issued by a state or the National Council of Examiners for Engineers and Surveyors; or verification of passing the Fundamentals of Engineering (FE) or Fundamentals of Surveying (FS) examination.
AND One year of entry level engineering, architectural or land surveying experience as an Engineering Assistant I with the State of Alaska or the equivalent elsewhere. Or: Five years of progressively responsible sub professional engineering experience of which two years was as a Journey level Engineering Technician or Drafting Technician III with the State of Alaska, or the equivalent elsewhere.
Substitution: Graduate study in engineering and/or architecture may be substituted for the required experience as an Engineering Assistant I. (2 semester/3 quarter hours equal one month of experience). Special Note: The employing department will identify Engineering-In-Training (EIT) positions. Transcripts which indicate the credit hours earned for the specific coursework may be requested at the time of interview or prior.

**Engineering Assistant III**

Bachelor's degree with a major in engineering, architecture or land surveying from an institution accredited by ABET. AND Two years of engineering, architectural or land surveying experience of which one year was at the working or intermediate trainee level. The specific experience includes such work as an Engineering Assistant II with the State of Alaska or the equivalent elsewhere. Or: A bachelor's degree with a major in a branch of engineering from an institution not accredited by ABET. AND An Engineer-In-Training (EIT) certificate issued by a state or the National Council of Examiners for Engineers and Surveyors; or verification of passing the Fundamentals of Engineering (FE) examination. AND Two years of engineering, architectural or land surveying experience of which one year was at the working or intermediate trainee level. The specific experience includes such work as an Engineering Assistant II with the State of Alaska or the equivalent elsewhere.

Substitutions:
Four years of any combination of ABET accredited postsecondary education in engineering, architecture, or land surveying (3 semester/4 quarter hours equal one month) and/or engineering, architectural or land surveying experience may substitute for the required degree.
Graduate study in engineering or architecture may be substituted for the required experience (2 semester/3 quarter hours equal one month).

**SALARY INFORMATION:**
- Engineering Assistant I  $4,803.00/Monthly
- Engineering Assistant II $5,536.00/Monthly
- Engineering Assistant III $6,328.00/Monthly

**DESIRED MAJORS:** Civil Engineering

**HOW TO APPLY:** Applicants are required to include a cover letter with their application for this position. In your cover letter, in professional business format, detail your experience, training and/or education that support how you meet the **minimum qualifications** and how your prior experiences/education support the "**desired skills, strengths, and qualifications**" listed in the job description above. The cover letter will be considered as a writing sample and will be used to determine which applicants will advance to the interview phase of the recruitment and selection process. Applicants who do not submit a clear, well organized, informative cover letter meeting the requirements detailed above will not be considered for an interview. Applicants are required to include a copy of your college transcripts (unofficial copies are acceptable).

Follow this link to apply **Engineering Assistant**.