

Freelance Subject Matter Expert (SME) – Vector Mechanics

Hiring organization
ansrsource

Description

We are seeking a Freelance Subject Matter Expert (SME) in Vector Mechanics to support a range of educational and academic projects. As an SME, you will use your strong foundation in mechanical engineering principles to solve complex problems, enhance instructional materials, and ensure clarity, accuracy, and adherence to project guidelines.

Employment Type
Part-time

Job Location
Remote in India

Date posted
March 16, 2026

Responsibilities

1. Conceptual Expertise:

- Apply your deep understanding of **Vector Mechanics** to topics including:
- Statics and dynamics of particles and rigid bodies
- Equilibrium and distributed forces
- Kinematics and kinetics of particles and rigid bodies
- Energy, momentum, and virtual work methods
- Mechanical vibrations
- Provide detailed and accurate explanations, showcasing both conceptual depth and practical insight.

1. Content Review and Enhancement:

- Review existing academic or technical content for accuracy, clarity, and completeness.
- Identify and correct conceptual, factual, or computational errors.
- Suggest improvements to enhance pedagogical effectiveness and readability.

1. Guideline Adherence:

- Follow all project-specific instructions, including:
- Tolerance levels and rounding rules
- Formatting and stylistic requirements
- Terminology and notation standards

1. Problem Solving and Solution Authoring:

- Solve textbook-style or application-based problems across chapters such as:

- Statics of particles and rigid bodies
- Friction, moments of inertia, and virtual work
- Kinematics and kinetics of particles and rigid bodies
- Energy and momentum methods
- Vibrations and 3D motion
- Provide clear, step-by-step solutions that are technically sound and easy to follow.

Qualifications

- **Educational Background:**
Bachelor's, Master's, or Ph.D. in Mechanical Engineering or a closely related field.
- **Experience:**
 - Teaching, tutoring, or academic content creation experience in Engineering Mechanics or Dynamics preferred
 - Prior experience working on educational platforms or courseware development is a plus
- **Skills:**
 - Strong grasp of mechanical principles and mathematical modeling
 - Excellent problem-solving and analytical skills
 - Precision in identifying and correcting technical errors
 - Ability to follow strict formatting and editorial guidelines
 - Clear and concise written communication

Equal opportunity statement

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