

# Missouri Department of Transportation

Code: R05013

Title: Research Engineer

Exemption Status: Exempt

Grade: 11

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## Job Description

**Effective Date** 07-01-2022

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**Replaces  
(Effective Date)** 07-16-2021

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**General Summary** The research engineer designs or leads research projects to develop solutions to problems with the design, materials and practices used in highway and bridge construction and maintenance; assists the development and implementation of research findings and in sharing results through technology transfer. Responsibilities are performed under general supervision.

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**Minimum/Required  
Qualifications** Bachelor's Degree in Engineering from an ABET-accredited college or university curriculum.  
Licensed as a Professional Engineer in the State of Missouri.  
Six years of progressive experience in engineering positions, including demonstrated ability to manage teams and multiple projects, and focus on several functional areas of engineering positions.

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**Supervisory  
Responsibilities** Lead Worker Only

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**Location** Central Office - Construction and Materials

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**Special Working  
Conditions/Job  
Characteristics** Job requires occasional, statewide and out of state, overnight travel.

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## Examples of Work

- (1) Manages research projects conducted by external research teams, including coordinating with laboratory or field personnel on work performed at construction or maintenance sites.
- (2) Facilitates coordination between MoDOT and external researchers for meetings, data collection, field work, and report review. Investigates and analyzes unusual, emergency, or complex engineering problems; develops recommendations for solutions to problems and prepares reports of investigations.
- (3) Assists the Research Director with process and procedure improvements within the Research Section.
- (4) Works with divisions and districts to assist in developing research needs for the department.
- (5) Assists with new project selections, works with divisions and districts to develop Requests for Proposals, and conducts selection meetings.

- (6) Represents the department on the American Association of State Highway and Transportation Officials (AASHTO) Research Advisory Committee to share best practices with other states and help promote research of regional or national significance.
- (7) Reviews and disseminates best practice methods proposed by national organizations, and reviews innovations and new product information to prepare recommendations for possible use or implementation by the department.
- (8) Investigates and analyzes unusual, emergency, or complex engineering problems; develops recommendations for solutions to problems and prepares reports of investigations.
- (9) Reviews or prepares specifications and special provisions; reviews construction plans for implementation of recommended special procedures; reviews standards and best practice methods proposed by national organizations.
- (10) Performs lead worker responsibilities, which may include providing general instruction, assigning and reviewing work, coaching and training, providing guidance and instruction in the proper and most efficient methods of accomplishing tasks, and providing input to the direct supervisor on staffing decisions and performance management.
- (11) Performs other responsibilities as required or assigned.

**The Missouri Department of Transportation promotes an equal opportunity workplace that includes reasonable accommodation of otherwise disabled applicants and employees. Please see your manager should you have any questions about this policy or these job duties.**