

JOB DESCRIPTION AND POSITION CLASSIFICATION

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| CLASSIFICATION Student Assistant (Engineering & Architectural) | | DWR POSITION NUMBER 1491-4871-900 | SAP POSITION NUMBER 50066535 | MCR 1 |
| APPOINTEE Vacant | | SAP PERSONNEL NO. TBD | DIVISION/SECTION DFO/Risk Assessment and Mapping Section | |
| COLLECTIVE BARGAINING IDENTIFIER Management Related BU: <input type="checkbox"/> Supervisory Related BU: <input type="checkbox"/> Confidential Related BU: <input checked="" type="checkbox"/> Rank and File BU: R11 | | | | |
| RESPONSIBILITIES EXERCISED <input type="checkbox"/> Supervisory <input type="checkbox"/> Lead Person | | IMMEDIATE SUPERVISOR (Print) MD Haque | | SUPERVISOR'S CLASSIFICATION Supervising Engineer, Water Resources |
| APPROVED BY (Personnel Analyst's Name) Kimberly Balbuena | | | | DATE 8/27/25 |
| <i>Percent of Time</i> | <i>Activity</i> | | | |
| | <p>POSITION SUMMARY</p> <p>Under the general direction of Section Manager and Senior Engineer, Water Resources (Specialist) the Student Assistant (Engineering and Architectural Sciences) will assist with watershed based hydrologic and hydraulics (H&H), and geomorphic analyses corresponding to the Risk Assessment and Mapping Section (RAMS) special studies, alluvial fan special study and other mapping and modeling activities statewide. The incumbent will also support other technical work on Scientific Research and Development, data collection, artificial intelligence (AI) applications, H&H model development and application, and web-based information exchange management application in support of the RAMS special projects and risk mapping program activities.</p> <p>ESSENTIAL FUNCTIONS</p> <p>This position requires the incumbent to work cooperatively with others in a courteous and professional manner; be detail oriented; exercise good judgment and be able to keep a regular work schedule. Good interpersonal and communication skills are essential. Experience with MS Office applications including Word, Excel, and Power Point is required. Knowledge in computer applications of mathematical modeling software such as HEC-RAS, HEC-HMS, geo-spatial analyses software (ARCGIS, QGIS, SMS etc.) and programming such as MATLAB, R, Python etc. is desirable. Experience working in a diverse team environment in an academic or professional setting is desirable. The specific duties are, but are not limited to, the following:</p> | | | |
| 40% | <p>Perform basic engineering tasks including research and analyses of topographic, bathymetric, and geomorphic data to evaluate channels and streams flow capacities in watersheds/alluvial fans for flash flood, mud and debris flow risk assessments. Prehigh-floodric, H&H inputs for development and application of flood models utilizing ARCGIS, HEC-HMS, HEC-RAS and other modeling software for streamflow and floodplain analyses for high flood risk areas in the Central Valley and within the State. Perform basic engineering tasks to assist section manager and H&H modeling subject matter experts (SME) to postprocess and visualize, flood modeling results that may include</p> | | | |
| SUPERVISOR'S STATEMENT: I HAVE DISCUSSED THE DUTIES OF THE POSITION WITH THE EMPLOYEE. | | | | |
| SUPERVISOR'S NAME (Print) MD Haque | | SUPERVISOR'S SIGNATURE ➤ | | DATE |
| EMPLOYEE'S STATEMENT: I HAVE DISCUSSED WITH MY SUPERVISOR THE DUTIES OF THE POSITION AND HAVE RECEIVED A COPY OF THE DUTY STATEMENT. | | | | |
| EMPLOYEE'S NAME (Print) | | EMPLOYEE'S SIGNATURE ➤ | | DATE |

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| CLASSIFICATION | | DWR POSITION NUMBER | SAP POSITION NUMBER | MCR |
| Student Assistant (Engineering & Architectural) | | 1491-4871-900 | 50066535 | 1 |
| APPOINTEE | | SAP PERSONNEL NO. | DIVISION/SECTION | |
| Vacant | | TBD | DFO/Risk Assessment and Mapping Section | |
| Percent of Time | Activity | | | |
| | preparation of plots, charts, statistics, maps, and animations for developing technical study findings and technical documents. | | | |
| 20% | Perform assignments to support the section’s special projects and technical studies including alluvial fan special risk assessment studies, central valley flood protection plan technical work, stream assessment studies, and hazard identification studies and mapping. Tasks include assisting engineers and SMEs for literature search and review utilizing contemporary study reports, publications in scientific and engineering journal articles and state and federal Agency document libraries and repositories. Prepare summaries of the research in support of special technical study projects. | | | |
| 20% | Assist special engineering project lead, unit and section managers in project and program management tasks including setting up coordination meetings, agenda and meeting material preparation and distribution, developing and tracking decision logs, organizing, cataloging, and archiving correspondence with the Federal Emergency Management Agency (FEMA), the U.S. Army Corps of Engineers, the Governor’s Office of Emergency Services (CalOES), and other internal and external partners and collaborating agencies on engineering studies. Assist section manager in organizing, cataloging, and archiving project data, deliverables and lessons learned. | | | |
| 10% | Assist the section manager and special project lead for Architectural and Engineering task order invoice reviews, service invoice reviews and reporting, preparing, and populating section budget planning and tracking spreadsheets and tools as directed. | | | |
| 10% | Assist engineers to collect watershed field data in coordination with Division of Engineering, Modeling Support Office, local agencies, United States Geological Survey, California Geological Survey and other State, federal, and local partners. Assist in creating and tracking an inventory of The Department of Water Resources (DWR) flood risk analyses and mapping projects, flood data, and information to support statewide risk assessment discovery process. | | | |
| | SPECIAL REQUIREMENTS | | | |
| | The Department of Water Resources is committed to its mission and employees, and we are grounded in our commitment to public safety. Regular, consistent, and predictable attendance is essential to the successful performance in this position. | | | |