



## **Mechanical Engineer - Graduate**

### **POSITION SUMMARY**

The **Mechanical Engineer – Graduate** is responsible for applying engineering principals and company values to each engineering project, in support of the engineer, providing high value solutions for clients. The graduate engineer's goal is to learn, grow, train, and perform all duties required to grow into a professional engineer. As a true learner and problem solver, the graduate engineer should be able to communicate questions and follow directions, complete engineering tasks requested and report back. The graduate engineer should be able to support the engineer to take jobs from start to finish and have attention to detail to make sure all components of the design are coordinated and communicated in the drawings and specifications. The applicant should be able to complete project management tasks and meet schedule requirements. Our graduate engineers are always looking for ways to improve.

### **ABOUT HENDRIX CONSULTING ENGINEERS**

Hendrix Consulting Engineers (HCE) is a consulting engineering firm that provides mechanical, electrical, and plumbing engineering as well as energy and commissioning services. HCE is currently registered in the State of Texas (F-4095) and has been in business for over 35 years. HCE has a long-standing reputation in Central Texas and is in historic Downtown Round Rock on Main Street. Our clients range from public school districts, cities, and counties to private developers.

Our mission is to “create ‘buildings of tomorrow’, through superior engineering today.” Our service level is in high demand, and to bring our value to more clients, we are growing. HCE is looking for new team members that align with our mission and culture and want to be part of a cutting-edge team that pushes for success in team members and client's projects to drive business success. HCE's average project manager has tenure of over 25 years and is ready to mentor the next generation to high levels of success. We want our team members to set, work for and reach their personal, professional, and financial goals. Our core values are the backbone of our business and guide our hiring process: we are inspirational, disciplined, intentional, transparent, aligned, and results oriented.

### **PERFORMANCE OBJECTIVES - GRADUATE**

- Align with HCE core values
- Show up to work everyday ready to learn
- Ability to learn ALL software required for job listed below
- Work towards attaining the following “Performance Objective Goals” by following HCE training program as quickly as possible

## **PERFORMANCE OBJECTIVES - GOALS**

- Apply proven HCE methodology to solving engineering problems
- Organize building HVAC zones, based on size, envelope, people, function of space, and desired level of control
- Evaluate multiple HVAC systems and strategies, and communicate pros, cons, and value of strategies and system to owner and architect, and provide recommendations
- Develop complete HVAC design, appropriate for building type, owner competencies, and works with architecture of building
- Communicate HVAC system requirements with architect, and other consultants for proper integration into building design
- Review engineering plans for completeness at SD, DD, CD phase of design
- Review, evaluate, and apply building codes and make interpretations for integration with design
- Review and edit specifications for specified scope
- Answer city review comments
- Answer RFIs and questions from contractors during construction, coordinate favorable solutions to issues that arise for owner and design team
- Review contractor submittals for compliance with contract documents
- Ability to review construction progress in field, identify deficiencies, and communicate to contractors for items to be corrected
- Ability to manage multiple projects from design through construction

## **CAPABILITIES / KEY COMPETENCIES / WORKING KNOWLEDGE - GRADUATE**

- Basic understand of mechanical engineering principles
- Basic understanding of Bernoulli's equation and principles
- Working knowledge of physics principles – friction, resistance, velocity
- Ability to take direction from engineer, apply strategy and follow through
- Working knowledge of geometry
- Ability to visualize objects in 3D and communicate about these objects

## **CAPABILITIES / KEY COMPETENCIES / WORKING KNOWLEDGE - GOALS**

- Psychrometric chart – RH vs Temp, absolute humidity, refrigeration cycle
- Working knowledge of calculating HVAC loads – walls, windows, roof, skylight, people, outside air
- Working knowledge of heat transfer
- Working knowledge of understanding of building codes
- Working knowledge of building pressure
- Working knowledge of building humidity
- Working knowledge of HVAC – sequence of operations
- Working knowledge of occupant comfort
- Working knowledge of energy efficiency
- Working knowledge of pipe sizing – water, waste, gas, etc..
- Select appropriate equipment based on load calcs
- Specify HVAC and plumbing equipment with all proper details, options to satisfy job requirements
- Use engineering principles to size select and specify all components. IE: ductwork, equipment, grilles, piping, fixtures, in a coordinated manner for complete mechanical design

## NON-ENGINEERING COMPETENCIES

- Ability to align with HCE mission, vision, and core values
- Team player – work with others to solve complex problems
- Ability to communicate technical information to non-technical people
- Attention to detail
- Excellent written and verbal communication skills required
- Ability to meet deadlines
- Ability to find multiple solutions to problems and present options to supervisor
- Ability to take direction from engineer and apply

## SOFTWARE SKILLS – REVIT - BIM

- Implement engineering solutions in REVIT and AutoCAD BIM software
- Use software to produce engineering documents to communicate solutions
- Coordinate with architects and other engineers inside BIM software
- Review drawings produced with software for accuracy to solutions
- Use online project BIM coordination software to communicate with clients

## OTHER SOFTWARE

- Microsoft Office 365 suite of software
- Project management software
- Use load calculation software to determine mechanical equipment sizing
- Willingness and adaptability to learn new software to maximize performance

## EDUCATION & EXPERIENCE

- Bachelor or Master of Science in Engineering from accredited University
- Engineer in Training (EIT) or work toward passing in first 6-12 months of employment
- Professional Engineer (PE) or work toward passing and obtaining license within 4-6 years
- Minimum 0 years in MEP engineering industry

## PHYSICAL REQUIREMENTS

- Ability to work on computer at desk
- Ability to walk jobsites
- Ability to drive to jobsites
- Ability to work in office (this is not a remote position)
- Pass background checks required for working in school and government buildings
- Applicants must currently be authorized to work in the U.S. on a full-time basis. We are unable to sponsor or take over sponsorship of employment visas

## COMMITMENT TO DIVERSITY

Hendrix Consulting Engineers operates an equal opportunity employer committed to meeting the needs of a multigenerational and multicultural workforce. We hire local talent at all levels based on technical ability and our core values: we are inspirational, disciplined, accountable, transparent, aligned, and results oriented, regardless of race, color, religion, age, national origin, gender, or disability.

**If this position caught your eye, send us your resume!** For best consideration, include the job title, cover letter, and source where you found this position in the subject line of your email to [careers@hcengineer.com](mailto:careers@hcengineer.com). Already a Hendrix Consulting Engineers candidate? Please connect directly with your recruiter to discuss this opportunity.

## **COMMITMENT TO GROWTH**

Hendrix Consulting Engineers is in an ever growing and changing market. We are committed to growing our business and team members by innovating, creating, and adopting new strategies, software, and technology to stay on top of our market and deliver best in class solutions and lifestyles.

## **Job Type – Full Time**

Pay: \$50,000 – \$95,000+ total compensation based on experience and performance.

Room for advancement available.

## **Benefits – Available**

- Health Insurance
- Dental Insurance
- Vision Insurance
- Paid Time Off
- Professional Development Assistance
- 401K

## **Schedule – (typical, options)**

- 8 hour shift - Monday to Friday
- 9 hour shift - Monday to Thursday , 4 hour Friday

## **Supplemental pay types**

- Performance bonus pay (5% - 25% typical based on company and individual performance)
- Company 401k contribution

## **Work location – Round Rock, Texas – in office position**