Job Title:	Mechanical Engineer	Level I	Grade FM15 \$48,100 - \$81,800
Jah Cada	1400	Level II	Grade FM16 \$54,100 - \$92,000
Job Code:	JA02	Level III	Grade FM17 \$58,700 - \$105,700
FLSA status:	Exempt	Level IV	Grade FM18 \$67,500 - \$121,500
		Level V	Grade FM19 \$77,600 - \$139,700
		ا/ امریم ا	Grade FM20 \$86 200 - \$163 800

## **Job Summary**

Provides mechanical engineering services and review of work as well as trouble shoot existing mechanical systems to resolve issues for conformance to university standards and design, fabricate, and test experimental apparatus.

## **Essential Functions**

- Reviews and manages moderate to complex designs and technical drawings created by outside consultants.
- 2. Provides mechanical engineering solutions, designs, and support for construction and maintenance projects on campus buildings and systems.
- 3. Designs, fabricates, and tests experimental apparatus in support of research projects.
- 4. Investigates building systems/equipment failures and difficulties to diagnose faulty operations, engineers solutions, and makes recommendations to maintenance crews.
- 5. Provides on-site inspections for projects under construction and troubleshoots existing systems to resolve problems associated with those systems.
- Inspects ongoing construction projects for conformance to plans and specifications created inhouse.
- 7. Develops and maintains university design and construction standards.

## **Supervisory Responsibility**

May supervise employees but supervision is not the main focus of the job.

The above essential functions are representative of major duties of positions in this job classification. Specific duties and responsibilities may vary based upon departmental needs. Other duties may be assigned similar to the above consistent with the knowledge, skills and abilities required for the job. Not all of the duties may be assigned to a position.

# Job Family Levels

Job	Job Family Levels					
Level	Responsibility	Knowledge	Education and Experience*			
I	Works under close supervision; receives specific and detailed instructions for required tasks and results expected. Performs a variety of routine tasks. Usually assumes no responsibility for direction of others.	Continuing developmental level. Limited exercise of judgment required when less common methods or procedures are necessary.	B.S. in Mechanical Engineering and no experience.			
II	Performs standard engineering work requiring application of standard techniques and procedures. Assignments may include higher-level work for developmental purposes. Receives close supervision on new aspects of assignments. Uses prescribed methods, performs specific and limited segments of an experienced engineer's broader assignment.	Continuing developmental level. Limited exercise of judgment required when less common methods or procedures are necessary.	B.S. in Mechanical Engineering plus 2 years professional experience. Experience must include at least 2 years at the preceding level or equivalent.			
III	Assignments have clear and specific objectives and require investigation of a limited number of variables. Receives instructions on specific assignment objectives, complex features, and possible solutions. May be assisted by engineers or technicians and be responsible for single phase of a project.	Independently evaluates, selects and applies standard engineering techniques and procedures while using judgment when making minor adaptations and modifications.	B.S. in Mechanical Engineering plus 3 years professional experience. Experience must include at least 2 years at the preceding level or equivalent.			
IV	Plans and conducts work requiring judgment in independent evaluation, selection and substantial adaptation/modification of standard techniques, procedures, and criteria. Devises new solutions to problems encountered. Independently performs most assignments with instruction only regarding general expected results. May supervise a few engineers and/or technicians on project basis.	Fully competent in all conventional aspects of subject matter or functional area of assignments.	B.S. in Mechanical Engineering plus 4 years professional experience. Experience must include at least 2 years at the preceding level or equivalent.			
V	Makes decisions independently regarding engineering complexities and methods. Supervision and guidance relate largely to overall objectives, critical issues, new concepts and policy matters. Supervises, coordinates and reviews work of small staff of engineers and/or technicians. As individual researcher or staff specialist, performs complex or novel assignments requiring development of new and/or improved techniques and procedures.	Applies diversified knowledge of engineering principles and practices to broad variety of assignments and related fields. Requires use of advanced techniques and modification and extension of theories, precepts and practices in individual's field.	B.S. in Engineering or closely related field, certification as a Professional Engineer (PE), and 6 years of progressive engineering experience as a PE. Experience must include at least 2 years at the preceding level or equivalent.			

Plans and develops engineering projects concerned with unique or controversial complexities which have important impact on major organization programs. Plans, organizes and supervises work of staff of engineers and technicians. As individual researcher, consultant or staff specialist conceives plans and conducts research in areas of considerable scope and complexity.

Technical liaison to individuals within or outside his organization involving exploration of subject area, definition of scope, selection of areas for investigation and development of novel concepts.

B.S. in Engineering or closely related field, certification as a PE, and 8 years of progressive engineering experience as a PE. Experience must include at least 3 years at the preceding level or equivalent.

\* See the "Minimum Required Education and Experience" section of the job description for any substitutions that may be allowed for education and experience.

## **Minimum Required Education and Experience**

**Level I** B.S. in Mechanical Engineering and no experience.

**Level II** B.S. in Mechanical Engineering plus 2 years professional experience. Experience must

include at least 2 years at the preceding level or equivalent.

Level III B.S. in Mechanical Engineering plus 3 years professional experience. Experience must

include at least 2 years at the preceding level or equivalent.

**Level IV** B.S. in Mechanical Engineering plus 4 years professional experience. Experience must

include at least 2 years at the preceding level or equivalent.

**Level V** B.S. in Engineering or closely related field, certification as a Professional Engineer (PE),

and 6 years of progressive engineering experience as a PE. Experience must include at

least 2 years at the preceding level or equivalent.

**Level VI** B.S. in Engineering or closely related field, certification as a PE, and 8 years of

progressive engineering experience as a PE. Experience must include at least 3 years at

the preceding level or equivalent.

#### **Focus of Education**

Degree in Mechanical Engineering required for Level I, II, III, and IV. Degree in Engineering or closely related field and certification as a Professional Engineer required for Level V and VI.

### **Focus of Experience**

Experience in engineering practices and principles

#### Substitutions allowed for Education:

Indicated education is required; no substitutions allowed.

## Substitutions allowed for Experience:

When a candidate has the required education, but lacks the required experience, they may normally apply additional appropriate education toward the experience requirement, at a rate of one (1) year relevant education per year of required experience.

## Minimum Required Knowledge

See Job Family Levels

## **Certification or Licensure Requirements:**

Certification as a Professional Engineer is required for levels V and VI of this job family. Valid Driver's License

# **Physical Requirements/ADA**

Occasional and/or light lifting required. Limited exposure to elements such as heat, cold, noise, dust, dirt, chemicals, etc., but none to the point of being disagreeable. May involve minor safety hazards where likely result would be cuts, bruises, etc.

Routine deadlines; usually sufficient lead time; variance in work volume seasonal and predictable; priorities can be anticipated; some interruptions are present; involves occasional exposure to demands and pressures from persons other than immediate supervisor.

Job frequently requires .

Job occasionally requires standing, walking, sitting, reaching, climbing or balancing, stooping/kneeling/crouching/crawling, talking, hearing, handling objects with hands, and lifting up to 25 pounds.

Vision requirements: Ability to see information in print and/or electronically, ability to distinguish colors.

Date: 4/15/2022