Auburn University Job Description

Job Title: Prin Res Sci/Eng H'ville

Job Summary
Conducts research in various fields of engineering or science to discover facts or perform research directed toward investigations, evaluation, and application of engineering or scientific theories and principles.

Essential Functions
1. Leads research and development projects requiring the applications of professional engineering or scientific practices and principles.
2. Provides technical contributions and develops concepts that lead to new leading edge technologies/techniques/methods.
3. Provides in-depth technical advice to other areas.
4. Operates, maintains, and repairs specialized equipment.
5. Advises faculty, postdocs, students, and staff with design, modification, prototype, processes, analysis procedures, and other engineering solutions.
6. Designs and fabricates equipment, materials, systems utilizing engineering and scientific practices and principles.
7. Ensures supplies are available and operational for use in projects.
8. May manage local computer systems for laboratory functionality.
9. Develops proposals, budgets, schedules and progress reports and presents results.
10. Evaluates findings to develop new concepts, equipment, or processes.

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.
## Auburn University Job Description

### Job Family Levels

<table>
<thead>
<tr>
<th>Level</th>
<th>Responsibility</th>
<th>Knowledge</th>
<th>Education and Experience*</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>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.</td>
<td>Familiarity with engineering/scientific staff, methods, practices and programs.</td>
<td>PhD in engineering, science, or related field and no experience. Candidates with a Bachelor's or Master's degree may substitute relevant experience toward the PhD requirement at the rate of two (2) years relevant experience per year of required education.</td>
</tr>
<tr>
<td>II</td>
<td>Performs standard engineering/scientific 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.</td>
<td>Continuing developmental level. Limited exercise of judgment required when less common methods or procedures are necessary.</td>
<td>PhD in engineering, science, or related field plus 2 years professional experience. Experience must include at least 2 years at the preceding level or equivalent. Candidates with a Bachelor's or Master's degree may substitute relevant experience toward the PhD requirement at the rate of two (2) years relevant experience per year of required education.</td>
</tr>
<tr>
<td>III</td>
<td>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.</td>
<td>Independently evaluates, selects and applies standard engineering/scientific techniques and procedures while using judgment when making minor adaptations and modifications.</td>
<td>PhD in engineering, science, or related field plus 4 years professional experience. Experience must include at least 2 years at the preceding level or equivalent. Candidates with a Bachelor's or Master's degree may substitute relevant experience toward the PhD requirement at the rate of two (2) years relevant experience per year of required education.</td>
</tr>
<tr>
<td>IV</td>
<td>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.</td>
<td>Fully competent in all conventional aspects of subject matter or functional area of assignments.</td>
<td>PhD in engineering, science, or related field plus 6 years professional experience. Experience must include at least 2 years at the preceding level or equivalent. Candidates with a Bachelor's or Master's degree may substitute relevant experience toward the PhD requirement at the rate of two (2) years relevant experience per year of required education.</td>
</tr>
</tbody>
</table>
# Auburn University Job Description

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Qualification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>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/scientists and/or technicians. As individual researcher or staff specialist, performs complex or novel assignments requiring development of new and/or improved techniques and procedures.</td>
<td>Requires use of advanced techniques and modification and extension of theories, precepts and practices in individual’s field.</td>
<td>PhD in engineering, science, or related field plus 8 years professional experience. Experience must include at least 2 years at the preceding level or equivalent. Candidates with a Bachelor's or Master's degree may substitute relevant experience toward the PhD requirement at the rate of two (2) years relevant experience per year of required education.</td>
</tr>
<tr>
<td>VI</td>
<td>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.</td>
<td>Technical liaison to individuals within or outside the organization involving exploration of subject area, definition of scope, selection of areas for investigation and development of novel concepts.</td>
<td>PhD in engineering, science, or related field plus 10 years professional experience. Experience must include at least 2 years at the preceding level or equivalent. Candidates with a Bachelor's or Master's degree may substitute relevant experience toward the PhD requirement at the rate of two (2) years relevant experience per year of required education.</td>
</tr>
<tr>
<td>VII</td>
<td>Makes authoritative decisions and recommendations having important impact on extensive engineering or scientific activities. Determines program objectives and requirements, organizes programs, and projects, develops standards and guidelines for diverse engineering or scientific activities. As individual research or specialist, is recognized as leader and authority in broad area of specialization or intensely specialized field.</td>
<td>Applies a high degree of creativity, foresight, and judgment in anticipating and solving unprecedented engineering or scientific complexities.</td>
<td>PhD in engineering, science, or related field plus 12 years professional experience. Experience must include at least 2 years at the preceding level or equivalent. Candidates with a Bachelor's or Master's degree may substitute relevant experience toward the PhD requirement at the rate of two (2) years relevant experience per year of required education.</td>
</tr>
</tbody>
</table>

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

Minimum Required Education and Experience

Level I  PhD in engineering, science, or related field and no experience. Candidates with a Bachelor's or Master's degree may substitute relevant experience toward the PhD requirement at the rate of two (2) years relevant experience per year of required education.

Level II  PhD in engineering, science, or related field plus 2 years professional experience. Experience must include at least 2 years at the preceding level or equivalent. Candidates with a Bachelor's or Master's degree may substitute relevant experience toward the PhD requirement at the rate of two (2) years relevant experience per year of required education.

Level III  PhD in engineering, science, or related field plus 4 years professional experience. Experience must include at least 2 years at the preceding level or equivalent. Candidates with a Bachelor's or Master's degree may substitute relevant experience toward the PhD requirement at the rate of two (2) years relevant experience per year of required education.

Level IV  PhD in engineering, science, or related field plus 6 years professional experience. Experience must include at least 2 years at the preceding level or equivalent. Candidates with a Bachelor's or Master's degree may substitute relevant experience toward the PhD requirement at the rate of two (2) years relevant experience per year of required education.

Level V  PhD in engineering, science, or related field plus 8 years professional experience. Experience must include at least 2 years at the preceding level or equivalent. Candidates with a Bachelor's or Master's degree may substitute relevant experience toward the PhD requirement at the rate of two (2) years relevant experience per year of required education.

Level VI  PhD in engineering, science, or related field plus 10 years professional experience. Experience must include at least 2 years at the preceding level or equivalent. Candidates with a Bachelor's or Master's degree may substitute relevant experience toward the PhD requirement at the rate of two (2) years relevant experience per year of required education.

Level VII  PhD in engineering, science, or related field plus 12 years professional experience. Experience must include at least 2 years at the preceding level or equivalent. Candidates with a Bachelor's or Master's degree may substitute relevant experience toward the PhD requirement at the rate of two (2) years relevant experience per year of required education.

Focus of Education  PhD in engineering or science. Candidates with a Bachelor's or Master's degree may substitute relevant experience toward the PhD requirement at the rate of two (2) years relevant experience per year of required education.

Focus of Experience  Experience in engineering and research practices and principles

Substitutions allowed for Education:
When a candidate has the required experience, but lacks the required education, they may normally apply additional relevant experience toward the education requirement, at a rate of two (2) years relevant experience per year of required education.

Substitutions allowed for Experience:
Indicated experience is required; no substitutions allowed.

Minimum Required Knowledge
See Job Family Levels
Auburn University Job Description
Certification or Licensure Requirements: None Required

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 sitting, reaching, talking, hearing, handling objects with hands, .

Job occasionally requires standing, walking, climbing or balancing, stooping/kneeling/crouching/crawling, and lifting up to 50 pounds.

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

Date: 9/25/2013