

Position Title: **Engineer I**

Organizational Unit: Center for Imaging Science, College of Science

FLSA Status: Exempt

BASIC FUNCTION:

In support of CIS missions and projects, an Engineer I provides engineering support. The Engineer I, with guidance from more experienced engineers, translates technical guidance received from the project lead into engineering system components, including analysis, design, fabrication, testing, maintenance and adjustment. Provide technical direction and mentoring to more junior engineers, including students.

MINIMUM QUALIFICATIONS*

* Substitution of relevant education or experience for stated qualifications may be considered.

Knowledge, Skills, and Abilities:

- Fluent knowledge of engineering development techniques.
- Working technical knowledge of the major CIS operational subsystems in specific area of engineering expertise.
- Working ability to operate and design appropriate engineering hardware equipment.
- Working knowledge of engineering drawing, design, analysis, and development software tools.
- Good verbal and written communication skills.
- Good ability to work in a team and to establish and maintain effective professional working relationships.
- Fluent knowledge in a specific engineering discipline.

Education

- *One of the following (suitable experience and accomplishments can be substituted, as appropriate):*
 - Undergraduate university Degree in an Engineering Discipline or a related technical field such as Computer Science, Physics, Math, or technical management

Experience

- Some experience in engineering systems development and design projects.

*Duties and Responsibilities**

* See annual performance goals and objectives for complete list

An **Engineer I** will design, develop, deploy and make modifications and enhancements to engineering systems. To support this effort, the Engineer will, under the guidance of a team or project lead:

- Participate in the design, fabrication, and testing of engineering components.
- Participate in the determination of the effort and time that will be required to resolve engineering subtasks.
- Participate in the design of engineering subsystems, including new development, and modification and enhancement of existing systems. This includes usage of good design practices, documentation, and presentation of design reviews.
- Complete assigned tasks in an accurate, robust, well document and well tested manner according to the defined schedule.
- Keep the project or mission lead apprised of any problems or schedule slips as soon as they are apparent.
- Follow all defined guidelines for engineering development/maintenance and delivery.
- Participate in the development of specifications for, and performance of engineering tests on parts, tools, and material for engineering projects.

- Safely and efficiently operation engineering equipment and materials for engineering development and operation needs.
- Maintain knowledge in engineering expertise area.
- Attend staff meetings as required and perform other related duties.
- Provide technical direction and mentoring to more junior engineers, including students.
- Document work through design specifications, drawings, and engineering reports.

Division Approval:

HR Approval:

Effective Date:

Revised Date(s):

Definitions:

A **basic** level of expertise can be accomplished through the successful completion of a course in a specific area or a curriculum in a general field. This level would be assigned to someone who understands the basic topics, principles or practices within an area but has not practiced these principles in a non-class environment.

A **working** level of expertise can be accomplished through the successful completion of a curriculum in an area. This level would be assigned to someone who understands complex topics, principles or practices within an area but has not practiced these principles in a non-class environment.

A **fluent** level of expertise would be assigned to someone who understands the complex topics, principles or practices of an area and has demonstrated their competency through the completion of a small number (e.g. 3-4) of medium-sized to large-sized projects in a formal development environment.

An **expert** level would be assigned to someone who has a thorough understanding of topics, principles or practices in an area and has demonstrated their competency through the completion of a number (e.g. 8-10) of medium-sized to large-sized projects in a formal development environment.

A **demonstrated** skill indicates that a person has successfully completed this skill but there is some risk that the same result will not occur for the next opportunity.

A **proven** skill indicates that a person has successfully completed this skill often or with sufficient quality that it is expected that the same successful result will occur for the next opportunity.

Center Approval:

HR Approval:

Effective Date:

Revised Date(s):