

# ARL DISTINGUISHED UNDERGRAD RESEARCH PROGRAM

# FOR ENGINEERING, MATH, AND COMPUTER SCIENCE & ENGINEERING MAJORS

This guide is used to explain conditions of employment and wage rates for the ARL Distinguished Undergrad Research Program.

Requesting supervisors and students should consult this guideline before contacting the Office of Human Resources for appointments. To obtain approvals, refer to the "ARL Distinguished Undergrad Research Program Support" form on the ARL internal website.

#### **OBJECTIVE**

Under the guidance of an ARL faculty member, students in the program perform a comprehensive research project and receive training in advanced research methods.

#### **ELIGIBILITY**

(1) U.S. Citizenship; (2) minimum grade-point average (GPA) of 3.2; and (3) apply during their sophomore year.

#### **PROGRAM LENGTH**

Students will be supported for a maximum of two years beginning at the completion of their sophomore year provided that they maintain at least a GPA of 3.2 and make reasonable progress each semester.

#### **APPOINTMENTS**

Offers are typically made by the middle of the spring semester of the sophomore year and most students begin working at the end of spring semester. However, some appointments may begin at the beginning of the fall semester of the student's junior year.

#### **SALARY**

Juniors earn \$12.50 per hour and seniors earn \$14.00 per hour.

#### **WORK EXPERIENCE**

Students are expected to work full-time during the summer (up to 40 hours per week) and part-time during the academic year for a maximum of 20 hours per week.

#### THESIS REQUIREMENT

Students will formally present the results of their research during their final semester in the program.

A copy of any publication, etc., must be submitted via the student's research advisor at least six weeks before it is released.

**For more information about the program,** contact ARL Office of Human Resources (103 Applied Research Laboratory Building, 865-6373)

### **ARL Distinguished Undergrad Research Program Thesis Guidelines**

Students being supported through the Applied Research Laboratory by the ARL Distinguished Undergrad Research Program are required to submit a thesis and make a formal presentation during their final semester in the program.

A copy of any publication, etc., must be submitted via the student's research advisor at least six weeks before it is released. Students should contact their ARL research advisors for specific details regarding approvals.

A written thesis should include the following\*:

- a Title page (see sample format that follows)
- two copies of the Abstract
- a Table of Contents
- the BODY OF THE PAPER with chapters and sections, as appropriate, double-spaced, single-sided, with numbered pages
- a BIBLIOGRAPHY
- one copy of an academic vitae as an appendix to your thesis

#### **ABSTRACT**

The abstract comes directly after the title page. It is the place for you to (briefly) summarize the content of your paper. The abstract should be specific enough that someone can identify what you did in your thesis by only reading your abstract. It should be written in a paragraph form with up to 200 words. Be clear and concise. Answer the questions, "What problem were you trying to solve?", "How did you approach the problem?", and "Were you successful?"

Your abstract should include a statement of:

- the purpose of your research
- the methods used for analyzing the problem, collecting and synthesizing data, developing a solution, testing your solution, etc.
- the key results
- your conclusions including recommendation for the next step(s)

#### LENGTH

There are no requirements to the length. What is important is that the thesis represent a significant piece of work, is well done, and well presented.

#### **COPIES**

- 1 copy for ARL thesis advisor
- 1 copy for ARL Library

<sup>\*</sup> Students enrolled in the Schreyer Honors College must comply with additional requirements as outlined on the following website: http://www.shc.psu.edu/

# THE PENNSYLVANIA STATE UNIVERSITY APPLIED RESEARCH LABORATORY

# APPLIED ENTERPRISE SYSTEMS DEPARTMENT

# MAINTENANCE READINESS DEMONSTRATION

Albert B. Smith

Spring 2012

A thesis
submitted in partial fulfillment
of the requirements for the
ARL Distinguished Undergrad Research Program

Approved:		Date:	
	Name		
	Thesis Supervisor		
	Applied Research Laboratory		
		Date:	
	P. Gruber		
	Deputy Director		