



THE UNIVERSITY OF ARIZONA

Leadership  
Programs



## University of Arizona IBM Co-op Program

### Positions Available:

- Software Test/Automation Co-op – IBM Spectrum Protect or Spectrum Control
- Software Development Co-op – IBM Spectrum Protect
- Quality Assurance Co-op – IBM Spectrum Protect

### Pay Range:

\$15 per hour for 20 hours minimum/week (7 a.m. to 7 p.m. Monday through Friday, no weekends). Merit increases available each year based on performance.

### Minimum Qualifications:

- Must be a University of Arizona Student – Freshman, Sophomore, Junior, Senior are accepted.
- Must have own transportation to the IBM site at Kolb and I-10.
- Must be authorized to work in the United States.
- Must have a minimum 3.0 GPA (on a 4.0 scale).
- Must be able to work a minimum of 20 hours a week.

### Co-op Program Overview:

The University of Arizona Leadership Programs Office is accepting applications for paid Co-op positions on site at the IBM site at the UA Research Park (I-10 and Kolb). These positions involve work in testing, management, and development of computer software and data storage programs. Students who meet the qualifications are encouraged to apply for these positions, which are offered through a special contractual partnership between IBM and the University of Arizona Leadership Programs. Successful candidates will be expected to participate in the Leadership Program as a condition of employment.

### Terms of Employment:

Co-ops work year-round and continuously (this is not a summer internship) providing the Co-op remains:

- A degree seeking UA student (auditing classes does not meet this requirement)
- Continues to perform at or above expected standards as outlined in the performance evaluation

### Starting Date:

Applications are accepted on a rolling basis and interviews are offered as positions become open. Start dates are contingent upon the completion of a background check.

## Application Process:

Interested students may apply by sending attached application and resume (as a PDF) to:

Brendan Cassidy  
IBM/Tivoli Co-Op Administrator  
Brendan.Cassidy@ibm.com

Jessica Hill  
Associate Director, Leadership Programs  
crombie@email.arizona.edu

**Applications by email are preferred.** Applications and resumes (saved as a PDF) can be submitted electronically to: crombie@email.arizona.edu and Brendan.Cassidy@ibm.com. **Please include “IBM Co-Op program” in the subject line.**

Submitted applications will be kept on file and reviewed as positions open.

## Position Descriptions:

### Preferred Qualifications for Software Tester and Developer:

- The following majors will be highly considered for these positions: Computer Science, Computer Engineering.
- Other preferred majors include Business majors with computer emphasis, and all other Engineering types (ME, CE, EE, AE)
- The following qualities are highly sought for the program. Lack of any/all of these qualities is not a deterrent for acceptance to the program.
- Demonstrated computer/technical backgrounds including: software design and test, hardware test and troubleshooting, prior technical experience in related fields, knowledge of UNIX based operating systems.
- Successful experience with at least one programming language (Java, C, C++ preferred).

## Software Test/Automation Co-op – IBM Spectrum Control or Spectrum Protect

### Job Description:

Verification Testers will design and execute tests to validate program code meets design specifications. Testers work with Development Software Engineers to review functional designs, create and run test cases, and other development tasks as assigned. By working in this position, candidates will develop expertise in storage management software and systems administration in a distributed, enterprise environment. Testers will receive real time education of common software engineering practices and the development process associated with delivering software in the Information Technology market. Testers will have opportunity to get hands-on experience with various operating systems, software products, and storage devices such as disk, tape, optical, TCP/IP, LAN, WAN, and leading-edge SAN environments. A few examples of tasks include: reviewing of existing and new function designs; testing case design, creation and execution using tools, Java, JavaScript, etc; determining problems and documentation of code defects; setting-up and configuring test environments; and programming tasks as assigned. While working in this position the Co-op will gain experience with a Global company, have visibility to different careers in programming, and will have opportunity to be considered for future employment at IBM.

### Required Skills and Attributes for this Position:

- Basic through advanced programming knowledge.
- Ability to understand medium to difficult technical concepts.
- Ability to manage time and complete work.
- Strong teamwork skills.
- Good communication skills- verbal and written.
- Desire to learn, work hard, and have fun.
- Successful experience with at least one programming language. (Java, C, C++ preferred)

## **Software Development Co-op – Spectrum Control**

### **Job Description:**

Development co-ops will implement code to meet product design specifications. Co-ops work with Development Software Engineers to review functional designs, algorithms, and other development tasks as assigned. By working in this position, candidates will develop expertise in storage management software and systems administration in a distributed, enterprise environment. Developers will receive real time education of common software engineering practices and the development process associated with delivering software in the Information Technology market. They will also have an opportunity to get hands-on experience with various operating systems, software products, and storage devices such as disk, tape, optical, TCP/IP, LAN, WAN, and leading-edge SAN environments. A few examples of tasks include: reviewing of existing and new function designs; coding case design, creating and executing tools, C, Perl, scripting, Java, etc; determining problems and fixing code defects; and setting-up and configuring environments. While working in this position the Co-op will gain experience with a Global company, have visibility to different careers in programming, and will have opportunity to be considered for future employment at IBM.

### **Required Skills and Attributes for this Position:**

- Basic through advanced programming knowledge.
- Ability to understand medium to difficult technical concepts.
- Ability to manage time and complete work.
- Strong teamwork skills.
- Good communication skills- verbal and written.
- Desire to learn, work hard, and have fun.
- Successful experience with at least one programming language. (Java, C, C++ preferred)

## **Quality Assurance Co-op – Spectrum Control**

### **Job Description:**

Quality Assurance co-ops will execute tests to validate that the program code meets design specifications. Co-ops will work alongside Software Engineers to review design plans, execute test cases, and analyze results. By working in this position co-ops will gain a high-level understanding of the software development process and storage systems administration in a large-scale environment. Co-ops will have the opportunity to get hands-on experience with various operating systems, software products, and storage devices such as disk, tape, optical, TCP/IP, LAN, WAN, and leading-edge SAN environments. A few examples of tasks include: working on test case design, executing tests using different tools, documenting and exploring defects. While working in this positions the Co-op will gain experience with a Global company, be exposed to different careers, and will have the opportunity to be considered for future employment at IBM.

### **Required Skills and Attributes for this Position:**

- Basic programming knowledge.
- Ability to understand technical concepts.
- Ability to manage time and complete work.
- Strong teamwork skills.
- Good communication skills- verbal and written.
- Desire to learn, work hard, and have fun.

### **Preferred Qualifications for Quality Assurance Tester:**

- The following majors will be highly considered for this positions: Management Information Systems, Computer Engineering, Computer Science.
- Other preferred majors include Business majors with computer emphasis, and all other Engineering types with a programming background
- Successful experience with at least one programming language.
- The following qualities are highly sought for the program. Lack of any/all of these qualities is not a deterrent for acceptance to the program. Demonstrated computer/technical backgrounds including:
  1. Software design and test.
  2. Hardware test and troubleshooting.
  3. Prior technical experience in related fields.
  4. Knowledge of UNIX based operating systems.

# Program Application

*Please fill out and return to the above contact with an attached resume.*

Name:

Phone #:

E-mail address:

Year in School:

Major:

GPA:

Please answer the following questions in as much detail as necessary:

What is your motivation in applying for the IBM/UA Co-Op program?

Which position most interests you and why?

Is there any additional information you feel is relevant to your application for this program?

**\*NOTE\*** Applications will be accepted on a rolling basis and considered when positions become available. Please note any priority deadlines.