Introduction to the University Environment

A guide for volunteers
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Education is IBM’s number one social commitment. In addition to its globally diverse philanthropic donation programs, IBM encourages employees to volunteer in their local colleges and universities.

Visiting a university and working with faculty and students can be very rewarding — whether you are giving a guest lecture, mentoring a university student through MentorNet, or participating in IBM programs such as the IBM Academic Initiative.

The following information will help you work directly with universities preparing students for the IT industry. Today’s university environment may be different than the one you experienced when you were a student. The following tips, basic questions, and information are designed to help you better understand today’s academic environment, some of the challenges facing educators, and the state of higher education in general.
The higher education environment continues to evolve in response to economic changes and technological advances. Universities are well known for pushing the envelope in innovation and research, often becoming incubators for emerging technologies such as the Internet and open-source projects.

- Many universities are struggling with declining student enrollments in science and engineering, despite increasing marketplace needs for more graduates with information technology (IT) skills. The lack of qualified IT workers is a problem not only for the economic vitality of each country, but also for IBM, its business partners and its customers. IBM’s university strategy is, in fact, driven by the need for deeply skilled technical talent capable of developing innovative, leadership technology. Due to this looming shortage of IT professionals, many countries and governments have innovation and skills development initiatives underway.

- The world is evolving to a computing infrastructure that is open, flexible, vendor-neutral and based on open standards. Yet some computer science, engineering and information systems students might graduate unaware of the latest open-standards-based technologies and, in particular, how these interact with IBM products and technologies.

You should be aware of these and other high-profile issues, debates or media coverage about education in your town, state or country. You might search the Internet for information about your local or national educational authorities.
What kind of volunteer work can I do for a university?

Think about why you want to volunteer and what you have to offer a teacher, student, or university. Volunteering takes many forms: giving a presentation on open standards technologies, collaborating on research projects, or mentoring a graduate student on his or her thesis. Once you decide which type of volunteering is for you, look at the On Demand Community solutions for ideas on how to make your university visits a success.

While a Ph.D. is clearly not required, be sure to examine what you have to offer: special skills, job interests, etc. Don’t worry if nothing in particular springs to mind. Often just having someone with deep industry knowledge and experience is greatly appreciated. There are many types of general volunteering activities that are valuable at the university level. Ask yourself these questions:

- If you want to work directly with students, what are the key messages or experiences you want to leave with them?
- If you are open to a variety of projects, how can you best support the university's instructional goals?
- How do you think the academic researcher/instructor and students will benefit from your visit?
- What would you like to get from the experience?
Globally, the development of technical skills is a priority shared by universities and corporations. IBM collaborates with institutions of higher education around the world to drive innovation through research and skill development, to foster the technical talent that fuels economic growth. This talent is essential not only to IBM, but also to business partners, customers, academia, and governments.

Programs to support these goals provide value to academia and industry alike. The value of IBM’s contributions to higher education — through globally diverse and competitive philanthropic equipment and cash donation programs, and IBM’s Matching Gifts programs — continues to grow each year.

IBM also plays an active role through internal and external organizations that support diversity in higher education.

Examples include:

- **External**: Women in Engineering Programs & Advocates Network (WEPAN), Society for Women in Engineering (SWE), and the MentorNet advisory board
- **Internal**: IBM’s Women in Technology and Multicultural People in Technology initiatives
What is the IBM Academic Initiative?

The IBM Academic Initiative provides university faculty a broad array of IBM products and services, at no charge, for use in teaching and research. The IBM Academic Initiative portal also provides access to open standards-based software, access to hardware, training, curriculum consulting, as well as information on recruiting, research, and IBM products.

The portal is enabling the formation of a worldwide community, with 9,000 faculty members representing 100 countries. Six percent of the participating faculty is associated with community or technical colleges, and 3 percent are teaching at secondary schools. The portal is complemented by face-to-face interaction on school campuses and at technical conferences.

How have IBMers supported universities?

Globally, IBM volunteers support higher education in many ways beyond the corporate award and skill development programs.

- More than 1,000 IBMers serve as alumni leaders, advisory board members, adjunct faculty, guest lecturers, talent scouts, and diversity champions.
- IBM leads the industry in providing online mentors to college students studying science, math, engineering or technology through the MentorNet program.
- IBM volunteers are also active in professional associations and not-for-profit organizations focused on under-represented communities, to help improve the diversity of the talent pipeline.

How do IBM’s university programs relate to the company’s diversity priorities?

As we prepare tomorrow’s leaders for the on demand world, we need to ensure diversity in the global talent pool. At IBM, diversity is a business priority and our customers and partners expect us to understand them, if not look like them. We are committed to building a workforce as broad and diversified as the people in the markets we serve.

This effort is about understanding peoples’ unique characteristics, and including their wide variety of viewpoints in our workforce and our approach to our markets. Diversity means inclusiveness, whether geographic, gender, people with disabilities, culture, or sexual orientation. Through an ongoing commitment to inclusiveness and accessibility, we can reach new sources of talent and find new markets to fuel economic growth in the communities we serve.
Now that you have decided that you want to share your expertise and talents, it’s important to prepare in advance so you can make the most of your visit and make a real impact with students, faculty and staff.

Most of us have a relationship with a university, college or other higher education institution — as alumni, faculty member or lecturer, parent of a student, participant in a research project, or as a member of a local professional or academic society. When there is no existing relationship, you can always begin by working with your alma mater or with a local university.

What should I know and do before I visit a university?

- **Do your homework**: Visit the university’s Web site. Most universities publish not only basic information about its programs and departments, but also faculty contacts.

- **Understand student characteristics**: It is important to understand ever-changing student characteristics, as student needs may vary. Following are some general student characteristics for different types of institutions:

  **Technical, research, teaching, and liberal arts universities and colleges:**
  - Graduating students obtain sufficient depth for graduate study
  - Graduating students obtain skills required to work in industry
  - Increasing numbers entering from two-year institutions
  - Can have broad foundational knowledge in many subjects

  **Technical/community colleges and continuing education:**
  - Graduating students already in or entering workforce immediately
Increasing numbers entering from non-traditional populations

Graduating students transfer to a four-year baccalaureate program

Incoming students returning to academia from workforce with great variety of experience

Understand the climate: Before visiting a university, you should contact the IBM team that is active at the university — there might be IBM executives and division representatives assigned as official contacts. This will help you understand better IBM’s role on the campus and to leverage any established relationships (recruiting, research, skills and/or sales). See the following question for ways to find out more about IBM’s relationships with a specific university.

Have a clear mission or goal for your visit: Whom will you visit while on campus? What are you planning to accomplish? What is the university’s expectation for the visit?

How can I learn more about the IBM Academic Initiative and university relations?

Discover what’s available to faculty staff through the IBM Academic Initiative, at ibm.com/university. You can also subscribe to the monthly external newsletter available from the portal’s homepage to keep abreast of these programs.

For university skills development questions, or questions about the IBM Academic Initiative, send e-mail to ibmacad@us.ibm.com.

For general university relations questions, and for IBM retirees, please send an email to univrel@us.ibm.com or visit the IBM Academic Initiative portal.
**FAQs**

**Does IBM provide scholarships?**
IBM does not provide scholarships, except Watson Scholarships for children of IBM employees. Students should work with their career center or search the Internet to obtain a list of potential scholarship opportunities.

**How can students get a job?**
Colleges and universities are a great place to meet candidates seeking new challenges. IBM recruits graduates in computer science, computer engineering, information systems, electrical engineering, mechanical engineering, chemical engineering, as well as other technical degrees. We also look for candidates from disciplines such as math, finance, business and marketing. We use a combination of career fairs, information days/sessions, and campus placement pre-selection to build our interview schedules.

For more information and to apply, visit [www.ibm.com/careers](http://www.ibm.com/careers).

**Are there a lot of jobs in the IT industry?**
Eight of the top ten fastest-growing occupations for the years 2000-2010 are in the IT industry, for a total of 1.8 million jobs.

IBM employs more than 300,000 people worldwide in a wide variety of jobs - not only in programming, engineering or other technical fields. IBM needs people who like technology but might enjoy selling it, or helping customers learn how to use it, or managing how we build and deliver products around the world, and much more.

**How should I answer a question about how much money IT workers make?**
Tell students that you prefer not to answer with your personal information, and that salaries depend on many different things: the kind of job you have, your degree, your experience, and where you live. IBM and many other companies pay bonuses for outstanding work, while pay for salespeople is typically based on how much they sell each year. In the technical fields, beginning IT professionals typically earn anywhere from $38,000 to $72,000, depending on their degree, experience, and location.