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> *Tomorrow's Solutions*

The information revolution has transformed the world and the way it works. The essence of that revolution is a skilled information technology workforce. Unfortunately, that workforce is diminishing. Today, there is a critical shortage of trained information technology (IT) professionals, especially in the large system arena since S/390 courses are not common in university curricula.

Higher education is meeting the demand for courses in "hot" areas such as the Internet and Linux, but faculty and students may not understand that S/390® servers support these "hot" areas. S/390 technology is growing in the Fortune 500 companies, and S/390 servers are being relied upon heavily to meet the exploding demands of the Internet and exciting new areas such as e-commerce, business intelligence, ERP applications, and application development.

To meet increasing demands for technicians, IBM®'s vision is to offer an educational program that will help increase S/390 learning. This program links universities, the business world, and IBM in a synergistic effort to promote S/390 higher education and to strengthen the future career paths of the next generation of information technology.



IBM S/390 University Program

*Educating the Next Generation of
 Information Technology Specialists*



Today's Tough Challenges



> *What is the IBM S/390 University Program?*

To create more skilled S/390 graduates, the IBM S/390 University Program pulls together selected universities, sponsoring businesses, and IBM resources to provide a much-needed link between the academic world and the realities of the work place. The basis of the S/390 University Program is access to a remote S/390 environment for students and faculty, extensive learning options for faculty, plus a full range of available courseware.

Universities embrace the program because they can shape the curriculum and play an important role in enhancing the industry resource base. To participate in this program, universities must agree to teach S/390 topics as part of a four-year or two-year curriculum. Students can be educated on the platform in the manner best suited to the current curriculum and university teaching methodology. In addition, participating learning institutions must become involved in a skill-building Business Residency Project with a local S/390 business. This project helps ensure that education and the business world stay practically linked.

> *How is the program connected to the real business world?*

Education always works best when it is put to the test, and that is, in part, a goal of the IBM S/390 University Program. It brings universities, students, and local businesses together to reinforce and extend what's being taught in the classroom.

Businesses are encouraged to provide appropriate resources to the universities, including adjunct faculty or guest lecturers. The businesses also provide valuable experience and insight into the current uses and skill needs of S/390 technologies. They can also help the universities to strategically modify their curriculum topics to address dynamically changing business needs.

In another aspect of the program, the local businesses define a relevant S/390 project for the students to work on. This valuable exercise, the Business Residency Project, promotes learning about the business environment, provides students with a hands-on opportunity to apply S/390 knowledge, and helps develop a further understanding of how businesses use the S/390 platform to implement new technologies and projects.

> *How does the S/390 University Program work?*

IBM is deeply involved as an active participant. IBM's role is to provide consulting, technology leadership, and continuing support. This support includes providing three important S/390 University Program elements:

1. The S/390 Knowledge Center

The S/390 Knowledge Center functions as a course repository and provides access to a native S/390 environment that participating universities can access via the Web at no charge. Faculty can access courseware and use the environment as a part of classroom instruction, and students can use it to complete assignments and lab exercises.

Universities can make use of powerful S/390 features and functions without being concerned with installation or maintenance. IBM maintains the environment and keeps it current. To access any and all of this advanced technology, users need only a Web browser, but the university must provide an administrator to assign passwords to help ensure security.

2. Faculty Education

Faculty from universities can hone and develop skills to keep instruction current by participating in a three-part learning program:

- *Distance Learning Courses* on a wide array of topics, such as e-business, Java, DB2®, OS/390®, and more can be downloaded as needed via the Web. IBM Learning Services courses are also

offered as part of the faculty education program, allowing faculty to attend S/390 courses at various training centers across the country.

- *S/390 Intensive Courses* are presented in "Teach the Teachers" format and are offered at select times throughout the year.
- *Web Lectures*, conducted by top IBM engineers and software designers, provide technical updates on pressing topics.

3. Related Courseware

To provide faculty with a full range of support materials, two types of courseware are available:

- *Lecture Modules* can be downloaded by faculty and used as is, or modified to suit teaching styles and needs. These modules contain such helpful items as lecture notes, presentation foils, suggested assignments, and sample tests.
- *Facilitated Learning Courses* are suitable for delivery via distance learning. These courses contain student guides, CD-ROMs, related lab exercises, and supplementary reading materials. Instructors also receive a guide and test bank.

> *What are the program benefits?*

- Universities can provide more robust, sought-after graduates, helping to create stronger relationships with the business world and potentially increase the amount of grant money.

- Universities gain access to the latest knowledge and can enhance their information technology curriculum via information gathered from industry personnel and IBM developed courseware.
- Universities get a direct link to an S/390 environment and can tap its power and utility at any time (for no charge) and without worrying about maintaining the environment or incurring the expense of an IT staff.
- Students receive the most current training in the S/390 technology arena where future career and high-salary opportunities may exist.
- Students can use the Business Residency Program to gain hands-on experience solving real business problems in a real business environment.
- Students can make valuable career networking opportunities that can help lead to employment immediately upon graduation.
- Faculty at universities can stay on top of the most current technology information – assuring top notch instruction for students and adding prestige to the university.
- Business can gain the assurance that qualified S/390 technicians will be available tomorrow to meet increasing technology demands.

> *How do you enroll in the Program or learn more?*

IBM welcomes all those who wish to participate proactively in shaping the next generation of information technology and S/390 specialists. If you are interested in participating in the S/390 University Program, or want to learn more, visit the IBM Web site at ibm.com/s390/university.

ibm.com/s390/university