

Friedrich Schiller University breeds new generations of certified DB2 professionals.

Overview

■ **Application**

Hands-on database administration courses and certification program based on IBM DB2® Universal Database™

■ **Business Benefits**

Thousands of dollars saved in annual software licensing fees; 100% of graduates find jobs directly after graduation; collaborative research efforts to enhance DB2; highest DB2 certification passing rate among German universities

■ **Software**

IBM DB2 Universal Database for AIX®, Version 8.1

■ **Hardware**

IBM @server® pSeries® 620

■ **Services**

IBM Scholars Program



The largest university in Germany's Thuringia region, FSU cooperates with over 240 academic and research institutions worldwide.

A top-notch educational institution located in a high-tech boomtown, Friedrich Schiller University (FSU) in Jena, Germany, exemplifies the values of collaborating with the business world. Founded in 1558 in the Saale River valley region and named for the renowned author and poet, FSU has more than 19,500 students who are benefiting from the university's alliances with more than 200 research partners, including companies of all sizes.

“The market needs people who are adept at DB2 application programming, tuning, administration and configuration. It’s a testament to our program that all of our graduates find jobs directly after earning their degrees.”

—Professor Klaus Küspert, Head of Chair for Database and Information Systems, Friedrich Schiller University



Few German universities offer the extensive database administration training and DB2 certification preparation that FSU provides.

One of the university's strongest relationships over the years, especially in the area of computer sciences, has been with IBM. Through close contact with IBM and its participation in the IBM Scholars Program, FSU has been providing its students extensive hands-on instruction in IBM DB2 Universal Database since 1995. And recently, the institution began offering a certification program to its advanced students using DB2, Version 8.1, helping them meet market demands for one of the world's leading information management systems.

"The market needs people who are adept at DB2 application programming, tuning, administration and configuration. Our computer science students gain real experience in these areas, making them more attractive to employers," says Professor Klaus Küspert, head of chair for database and information systems, FSU. "In addition, many of our students have earned DB2 certification,

which demonstrates that they've achieved a certain skill level with DB2. It's a testament to our program that all of our graduates find jobs directly after earning their degrees."

First-hand experience with DB2

FSU's Computer Science Department has 13 professors and associate professors and, at any given time, about 800 students, including those studying for teaching credentials and those in the university's Bioinformatics and Business Administration departments. Typically, students are ready to choose an area of specialization in their third academic year.

Students who specialize in database technology are offered three courses involving DB2: a relational database theory class and two laboratory-based database administration classes. Because the university participates in the IBM Scholars Program, it receives complimentary software and learning materials from IBM for its non-commercial research, curriculum development and instructional needs.

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—Professor Klaus Küspert

"Through the IBM Scholars Program, we gain function-rich software from the fastest-growing database vendor on the market, which saves us thousands annually in software licensing fees," says Küspert. "As a teaching tool, DB2, Version 8.1, is valuable not only because it is a market leader but also because it is easy to implement and provides a robust core for e-business applications. Version 8.1 also offers useful enhancements such as the Configuration Advisor and Memory Visualizer that show our database administration students how easy it is to develop with DB2."

Working in small teams, student developers in the lab-based courses are immersed in all aspects of application development, from building data and relational models to writing applications and creating Web interfaces. Their efforts have yielded prototypical applications for activities such as course planning, conference management and student tracking, all based on DB2 running on an IBM @server pSeries 620. In fact, FSU's Database and Information Systems staff are using the student-tracking program to manage class assignments and monitor student progress. And their students can log on from a Web-based interface to check their grades and course requirements.



FSU students gain extensive experience with DB2 Extenders™, which are an efficient way to broaden the scope of DB2 to manage multimedia objects such as images, video and voice.

Meeting market demands for DB2 experts

One of the advantages that FSU can offer its students is database administration instruction, which most German universities don't provide. Another is the IBM certification program in DB2 fundamentals and DB2 administration. In collaboration with the IBM Germany Development Lab in Böblingen, the university offers a week-long certification course taken by about 30 students at a time and taught by a Böblingen Lab representative. After the course, students take a Web-based certification test which is proctored and monitored using an innovative Pearson VUE electronic testing solution.

"During the most recent offering, nearly 100 percent of our certification students passed the DB2 fundamentals exam and half of them passed the DB2 administration test," notes Küspert. "These results were better than what other universities in the country experienced, and we attribute this success to the knowledge our students gain from our hands-on DB2 administration lab course."

FSU's success with DB2 is drawing attention off campus, too. SCHUFA Holding AG, a German credit information supplier and DB2 customer, contacted the university and provided one of its students a summer internship after learning about its DB2 certification program. One recent FSU graduate, who successfully completed his certification in DB2, Version 8.1, administration, joined IBM Business Partner SAP right after graduation.

And several students have internships or full-time jobs with IBM in Germany and the U.S. Says Küspert, "We hope that these accomplishments will demonstrate the value of our program, and encourage more students to specialize in database technology."

Advancing information management technologies

At FSU, it's clear that collaborating with the business world is paying great dividends, enriching classroom instruction and preparing students for jobs. Its Computer Science Department continues to team with the Böblingen Lab on joint research projects in database technologies.

As an example of this collaboration, a graduate student involved in a backup and recovery research project created db2log and db2logstat, freeware tools that users worldwide are utilizing to analyze DB2 logs. Earlier this year, the Computer Science Department received an IBM Shared University Research Grant. The funds are enabling FSU staff to work with IBM developers to create object-relational

database systems and evolve the DB2 data model closer to the latest versions of the structured query language (SQL) standard, in order to enable the information management system to manage larger, more complex data sets.

"Working closely with IBM, we are gaining new insights and contributing our own expertise to advance DB2 and enrich the educational experience for our computer science students," says Küspert. "By building on our relationship with IBM, we hope to find new opportunities to equip our students with the advanced DB2 administration and development skills they'll need to be competitive in the job market."

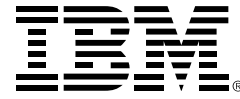
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