



*teaching
learning*

**HANDS-ON
HIGH-TECH**

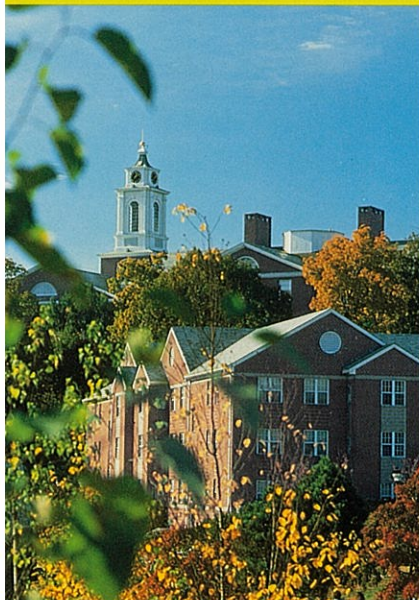
BENTLEY COLLEGE

Higher education has created parallel cultures — one for business, one for technology.

The challenge is to break through these cultural smokestacks and infuse technology into the core *business* curriculum.

Information technology (IT) is transforming every sector of the economy and every field of business. As hardware and software are developed and rolled out at lightning speed, Bentley College is preparing students to meet the new demands of an information-rich, technology-driven workplace. How? Through a business curriculum that integrates technology at every level. Concepts and theories that students learn in class come alive through several hands-on, high-tech learning laboratories — each among the first of its kind on a college or university campus.

Technology tools that support enterprise resource planning, distance learning, and other valuable applications complete the mix. The result is a powerful backdrop for teaching and learning that is unsurpassed in higher education today.



Center for Marketing Technology

The center is a “best practices” lab for studying complex forces that drive buying and selling in a global and electronic economy.

With the worldwide population of web-users at 400 million and climbing, the growing dominance of the Internet has fundamentally changed the practice of marketing. Products such as newspapers and music CDs can be virtualized. Electronic communication is ubiquitous. National boundaries are increasingly irrelevant as online advertising and e-commerce in the business-to-business sector soars. To be successful, today's marketers must understand the capabilities of these rapidly changing technologies and their influence on consumer behavior and on strategies for product development, pricing, promotion and delivery.

Equipped with 45 PCs and an array of specialized software, the Center for Marketing Technology (CMT) plays an integral part in Information Age Marketing programs at Bentley. Students gain a full grasp of software options, familiarity with the networked environment, and knowledge of the new frameworks and tools for improved decision-making in marketing.

Many marketing courses use the CMT; some are held there exclusively. The facility is an ideal testing ground for new technology tools in areas such as advertising creation, database marketing, product design and development, mass customization, geographical information systems, sales automation, and marketing decision support. Using CMT resources, students have conducted research and developed strategic marketing plans for real-world clients that include Boston Harbor Islands National Park and high-tech startup Turn On Media. The facility is also the setting for conferences, workshops and executive education programs.

The Center for Marketing Technology features a 39-seat classroom outfitted with state-of-the art multimedia presentation technology. Resources include a high-resolution document camera, VCR, and sophisticated audio/video system connected to four “minilabs” for research and team projects. One of the larger minilabs has video cameras for recording focus-group exercises, along with an adjoining observation room with one-way mirrored glass windows. In addition, a two-way voice intercom and video feed from the minilab to the main classroom enables professors to bring live focus-group exchanges into class discussion.

www.bentley.edu/tech_learning/labs/cmt.cfm



There is no substitute for hands-on experience. Our students acquire the confidence that comes from knowing how to use high-end tools, in an environment where most of their contemporaries will not have nearly the same abilities.



Rai Sisodia • Trustee Professor of Marketing • Director, Center for Marketing Technology

Design and Usability Testing Center

The center offers up-close exposure to information design and the creation of IT products that users can intuitively understand and easily employ.

As the marketplace for technology products continues to expand and the diversity of users increases, businesses are quickly learning the value of product usability and its impact on customer satisfaction and the user experience. More than ever, applications that enhance performance while reducing the learning load imposed on the end-user are yielding improvements to support costs, product development, brand loyalty and customer satisfaction.

The Design and Usability Testing Center puts into students' hands the same applications employed by technical communicators, web developers, user-interface designers and usability specialists. Students conduct field studies, create working prototypes for user interfaces and web designs, and test the usability of their designs. The lab experience offers a firsthand look at the intersection of human factors, information design, and usability.

Through corporate partnerships, the Design and Usability Testing Center delivers testing and design services to the larger community. Working on field-based projects for hardware, software and Internet companies enables graduate students in Bentley's Information Design program to reinforce their classroom experience. Under the expert guidance of a full-time usability engineer, students create, test and evaluate system designs for corporate clients. The unique partnering of the academic and corporate worlds provides a valuable service to local and national clients who may lack the resources to take on design and usability testing in-house.

The center has three distinct parts. A design lab contains 24 workstations for creating system prototypes. Each workstation has high-end web development software, rapid prototyping tools and sophisticated graphics applications. A control room serves as the communication center for maintaining systems and operating recording equipment. A testing room offers resources for conducting and recording usability tests for corporate clients. Using the college's sophisticated telecommunications network, the Design and Usability Testing Center can deliver live video feeds of tests, focus-group interviews, and design meetings to any location in the world.



www.bentley.edu/tech_learning/labs/dutc.cfm

The Design and Usability Testing Center operates as both a business and a learning laboratory. That's a powerful combination. Without ever leaving campus, students gain real-world educational experience that is second to none.



Chauncey Wilson • Assistant Professor, Information Design Program • Director, Design and Usability Testing Center



Trading Room

Combining **real-time data** and state-of-the-art technology, the Trading Room brings world **financial markets** to the campus of **Bentley College**.

The globalization and integration of financial markets during the past two decades have driven the innovation and complexity of financial products and increased reliance on rapidly changing technologies. Even floor-based, voice-based trading — long the cornerstone of Wall Street — is being replaced by electronic trading.

As the centerpiece of the college's Hughey Center for Financial Services, the Trading Room offers firsthand exposure to financial concepts such as portfolio construction, risk management and financial engineering. While finance students are the facility's primary users, graduate and undergraduate students studying accountancy, information technology, management, marketing, and other business disciplines also take advantage of Trading Room resources. For the corporate world, the Trading Room provides customized training in trading, investment administration, multivariate hedging strategies, and other areas.



Executives at a growing number of Boston-area companies, including John Hancock Financial Services and ArrowPoint Communications, have used the Trading Room to track the initial public offering (IPO) when their respective companies went public. The facility also serves as headquarters to the New England Tech Stock Index, a collaborative venture by Mass High Tech and Bentley College that is reported daily on the New England Cable News Network.

For students, hands-on trading sessions and mini-classes reinforce course content. Using real-time data and Financial Trading Software, students explore the fundamentals of constructing an investment portfolio, the role of private information and expectations in pricing securities, and the impact of market making and price taking. The sessions further illuminate the principles of finance theory related to trading strategies, corporate governance issues, and development of risk management strategies.

The Trading Room is equipped with 67 Dell OptiPlex 733 MHz Pentium 3 computers, each with dual NEC IBM flat-panel display, that are arrayed on 15 Woodtronics trading desks. Real-time market data is supplied by Reuters, Bridge and Bloomberg. Other resources include First Call, Market Guide, Data Stream and Expo. The Trading Room also features two Trans-Lux data walls, two picture walls, and three ticker tapes displaying market information, news headlines, and S&P Comstock data. An Enterasys Matrix switch delivers network connectivity to the floor, and 10 servers provide file and application serving as well as R&D support.

www.bentley.edu/tech_learning/labs/trading_room.cfm

Trading Room exercises offer a pragmatic, real-world perspective for students in finance and non-finance courses. The lessons they learn in valuation, trading and risk management will benefit them regardless of their career path.



Patrick Gregory • Assistant Professor of Finance • Director, Trading Room

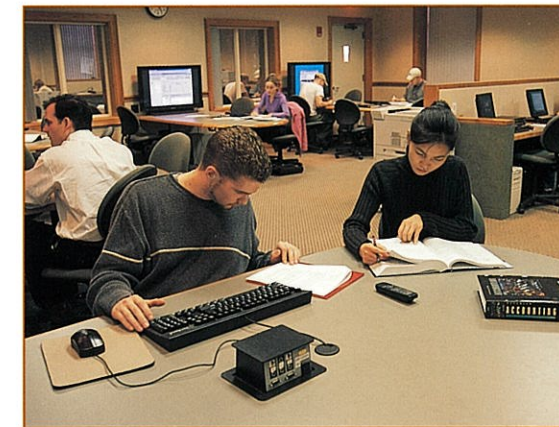
Here, students gain firsthand **experience** with the same sophisticated **technologies** that are reshaping the profession of **accounting** in the information age.

Accountants today fill the broader role of business consultant with an increased focus on industry processes. They are tapped to develop accounting systems and analyze operational data that drives management decisions. They apply IT skills in areas with a critical impact on revenue growth, such as electronic commerce initiatives, web-based applications, performance measurement tasks, and business risk analysis. Even the certified public accountant (CPA) exam has expanded to include a special section on IT-related topics.

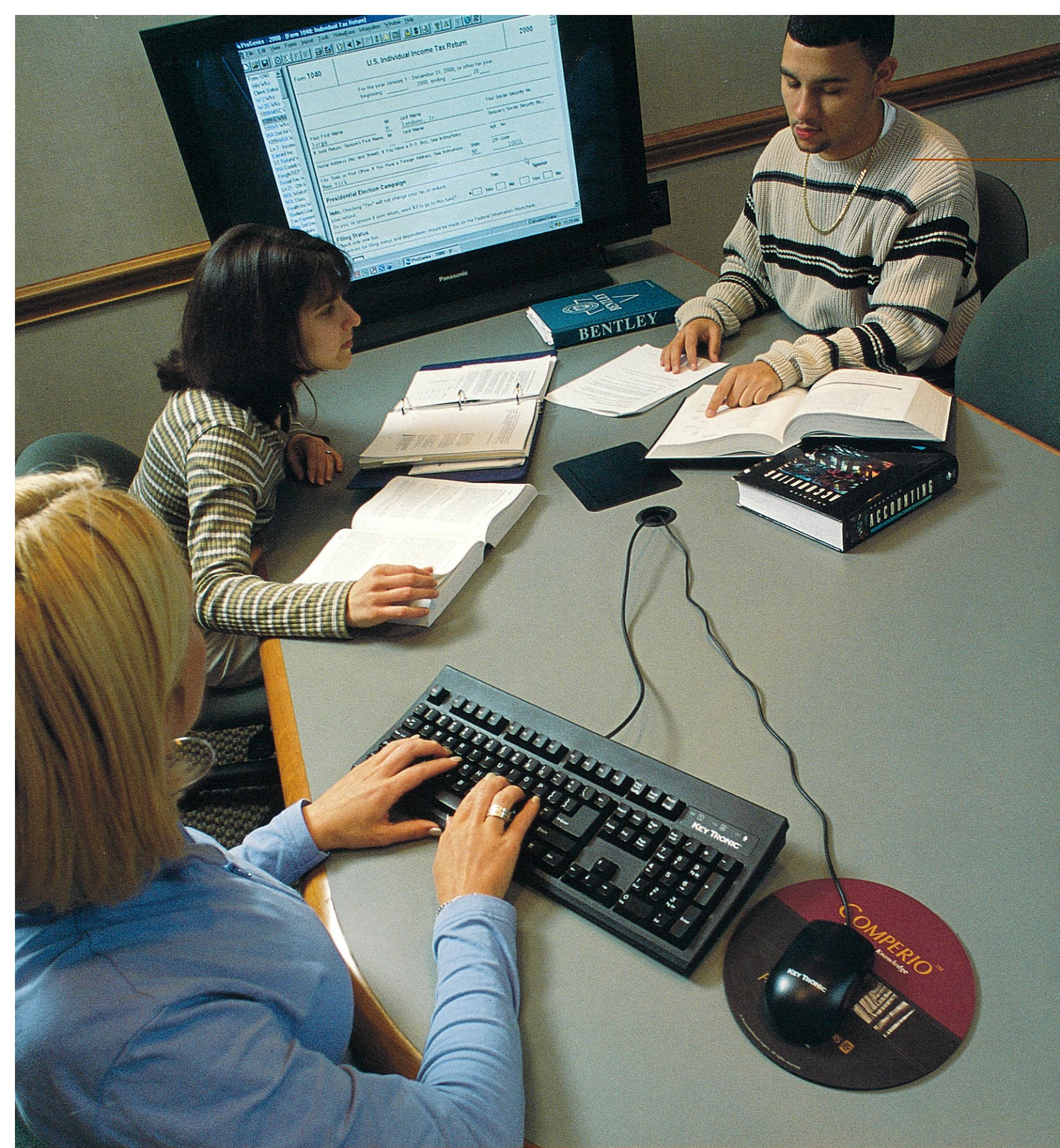
The resources of Bentley's Accounting Center for Electronic Learning and Business Measurement (ACELAB) foster the knowledge and skills needed for tasks such as using an enterprise system and analyzing data for management decision-making. Students develop a broad understanding of how information flows through an organization, how financial decisions are made, and how accounting relates to other business functions. They also gain practical experience with auditing and tax preparation software, report generating applications, data modeling, and other professional tools.

The ACELAB supports undergraduate and graduate programs in accountancy and accounting information systems at Bentley, as well as anyone enrolled in an accounting course. Hands-on experience begins in a student's first accounting course, with software such as Peachtree illustrating how technology enhances the flow of information. Electronic research software readies students to analyze complex reporting issues. Students also gain insight into the role of accounting and auditing within an integrated business system, through enterprise resource planning.

The facility comprises two distinct areas. The first contains a breakout room that features five group workstations, each with a 42-inch plasma monitor and individual laptop ports. There are also 10 individual workstations in the room and an attached conference room with its own PC and LCD projector. The second area is an interactive classroom with 36 PCs, flat-panel monitors, and projection equipment that can be used for class work, seminars and presentations.



www.bentley.edu/tech_learning/labs/acelab.cfm



We've received tremendous feedback from employers about the training ground that the ACELAB provides. They're very impressed that students are gaining exposure to the same methodologies being applied in business.



CLIC Center for Languages and International Collaboration

CLIC brings the **world** into focus with resources that hone students' modern **language** skills and foster their sensitivity to **cultures** and countries across the globe.

The global nature of commerce today touches industries across the business spectrum. U.S. companies form strategic alliances with their counterparts overseas. E-mail facilitates communication with clients worldwide. Business travel abroad continues to grow. To help seize the increasing opportunities in an international arena, employers look to individuals who are multilingual and familiar with other cultures. Professionals who can communicate, connect and function in foreign business environments are much in demand as firms move to expand operations beyond national borders.

At Bentley, the Center for Languages and International Collaboration (CLIC) builds students' awareness of other countries and cultures through the use of multimedia materials, state-of-the-art technology, and contact with Bentley peers who come from other countries. Along with being a key resource for professors, the center is a valuable training ground for language students, international studies majors, and others in the campus community who want to broaden their knowledge of global issues.

At clustered computer workstations, students use multimedia language programs and web-based resources to tackle course assignments independently or in small groups. For example, the Multilingual Jukebox offers online course materials in real time for French, Spanish, Italian, Chinese and Japanese; students also use the jukebox to access foreign radio and television programming over the Internet. All computers in CLIC connect to the college network and the Internet. Additional network ports that are located throughout the center allow students to plug in their own laptops.

One key element of CLIC is a 24-seat "global theater." Equipped with two 42-inch plasma screens and videoconference technology, the theater promotes real-time collaboration between Bentley students and professors and their counterparts overseas. International satellite programming offers news, feature programs, and movies in Spanish, French, Italian, Arabic, Hindi and Japanese. In a special workspace designed to resemble a bistro, students can practice conversation skills with a native speaker in any of the languages taught at Bentley.

www.bentley.edu/tech_learning/labs/clic.cfm



Integrating interactive digital media into the modern languages and international studies curricula is a fairly new development. In CLIC, students experience authentic language and culture in text, video and audio — nothing's watered down.



Jane Tchaïcha • Associate Professor of Modern Languages • Director, CLIC

Technology Resources

www.bentley.edu/tech_learning/atc.cfm

Helping faculty integrate technology into the Bentley curriculum requires a team of staff that understands pedagogy, business applications, and a range of discipline-specific technologies. The Academic Technology Center (ATC) is a key resource. Through individual and small-group sessions, ATC staff members help professors create and maintain course web pages, integrate videoconferencing and web-based resources into curricula, and identify technology resources for conducting research. The ATC supports faculty through one-on-one advising, workshops, and assistance with instructional technology projects and distance-learning initiatives. Faculty also may call on the ATC for help in finding, acquiring and using software relevant to their courses.

A sampling of technologies that the ATC supports:

Blackboard

Bentley faculty have used Blackboard to create more than 900 password-protected course web sites to support classroom and distance learning. The Blackboard system enables faculty members to post and revise syllabi, announcements, and links to online resources. Students can access course-related documents such as PowerPoint slides used in class or a sample spreadsheet that was part of a homework assignment. Students also use Blackboard to participate in threaded discussion groups outside class meeting times, e-mail their class or groups of classmates, and drop off electronic assignments for their professor. The system facilitates group projects as well, enabling student teams to share documents, calendars and online discussion.

Centra Symposium

This courseware supports web-based distance learning initiatives at Bentley, enabling classes to “meet” in real time, over the Internet. Symposium’s voice-over-Internet-protocol technology allows for live, two-way voice communication through student and faculty PCs. Lectures can be enhanced with PowerPoint presentations, video, synchronized browsing to relevant web sites, and other on-screen graphics, ensuring the same high-caliber instruction that students receive in traditional campus-based courses at Bentley.

Courses needed to earn the MS degrees in taxation and financial planning are available online via Bentley’s Centra servers. Other web-based offerings include business fundamentals courses in the Evening Information Age MBA program and courses in the Information Design Certificate program at the Center for Executive and Professional Education.

SAP

Enterprise resource planning (ERP) is transforming corporate operations worldwide — and creating enormous demand for people who understand how such systems are used. Bentley’s Information Age MBA and Accounting Information Systems programs use the world’s leading ERP system, SAP, to give students a clear window on this new model for integrating traditional business functions.

Students use SAP to manage business processes and relationships, from contact with suppliers to inventory control, product creation to distribution and maintenance. In simulating the way business works, students can buy and sell goods, control finances, and oversee human resources functions — and witness the outcomes of their management decisions.

Videoconferencing

On the rise in both business and education circles, videoconferencing enables a class session or meeting to be broadcast live from Bentley to one or more remote locations. The college has several on-campus sites for videoconferencing, in Morison Hall, the Adamian Academic Center, the Smith Academic Technology Center, and the Center for Languages and International Collaboration. Videoconferencing expands the reach of college programs in taxation, financial planning, information design, information age marketing, international studies, and other areas. Guest lectures and employer interviews may use videoconferencing as well.



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