We will discuss our experience of developing and delivering an online college-level Web design course, offered simultaneously to deaf college students at the National Technical Institute for the Deaf in Rochester, N.Y., and at the Ali Yavar Jung National Institute for the Hearing Handicapped in Mumbai, India. Various strategies were used to enrich the learning experience of deaf students, including visually accessible course materials developed on the Ideatools multimedia-enabled course delivery system, real time and asynchronous online discussions, real-time Web-based video broadcasts, one-to-one video chat, and multimedia video lessons in sign language with captions. The latter were delivered both on DVD and as streaming video over the Web. Students in each country attended class at the same time and interacted with each other online, thus having opportunities to increase cross-cultural awareness. Additionally, students at NTID and students in India developed skills in planning, designing and executing a Web site. We will discuss the rewards and challenges of creating an international electronic community of deaf students for access to technical education. This project is a model for distance-learning courses in technical education for deaf students both in the United States and internationally.