

2011 Smarter Planet Innovation Awards

Smarter Communications

A Faculty Award Program Sponsored by the IBM Academic Initiative

IBM is pleased to announce the 2011 Smarter Planet Faculty Innovation Award program, a competition designed to encourage the thoughtful development and incorporation of Smarter communications skills into Business and IT curriculums.

Smarter communications

Communications providers do more than provide a dial tone. They connect and enable business.



BACKGROUND: Personal communication technology has evolved from a way to stay in touch into entertainment on demand, an office wherever you go, and social networks and streaming media as constant companions. Industries and municipalities are also coming up with new ways to improve lives using broadband. Simply put, healthcare, education, utilities and other vital services will never be the same, thanks to creative thinking and high-speed data transfer.

On a smarter planet, almost anything can become digitally aware, instrumented and interconnected. We have the connections, processors, analytics and capabilities powerful enough for trillions of devices to talk to each other and improve the way the world works. Realizing the potential of smarter communication technology will require the infusion of new capabilities and models into our systems to make it easier for devices to transmit and interpret data, provide more secure connections, and protect identities.

Smarter communications curricula will help students recognize how broadband, mobile and RFID communications can change business processes. This multi-discipline growth area is undergoing rapid transformation and requires solutions which are instrumented, interconnected and intelligent. IBM is seeking to partner with universities who desire to create and teach innovative curriculum which develops professionals who have the combination of business/industry and technical skills needed to lead this transformation now and into the future.

The IBM Academic Initiative is seeking proposals for the design and development of teaching materials which will provide university instructors with courseware focused on the values and principles of developing and adopting smarter communications based tools and solutions promoting topics such as:

- Implementing cloud technology to increase revenue through the rapid delivery of new services
- Deploying mobile applications and communications processes which transform industry processes and human interactions (eg: how use of telemedicine reduces the need for onsite visits, hospitalization and assisted-living care; enabling microdonations worldwide via texts sent to aid organizations; wireless connections directly saved several people trapped in the rubble of the Haitian and Japanese earthquakes; campus and city mobile emergency response systems post Virginia Tech and 9-11 events.)
- Aligning communications technologies with meters and analytics to transform processes such as

transportation, food and other logistical distribution systems.

Note: To see specific examples that contribute to [Smarter communications](#), visit IBM's Smarter Planet website.

A course module which enables Smarter communications is defined as one which combines the disciplines of 1) identifying a business or societal need with 2) need for open standards based communications based services and technologies (broadband, cloud, mobile, RFID, ...) and 3) need for social-organizational change. The course module must also demonstrate the interactions of diverse types of complex service systems within the end-end solution or approach being taught.

The materials should be organized so that they may be used in whole or in part to teach students in lecture or on-line university offered courses and/or train internal university employees. All materials should be reproduction-ready and be electronically deliverable. Teaching materials should include:

- chapter-by-chapter course notes
- presentation slides and/or multimedia files for easily presenting the material to students
- course data sets for easily demonstrating the concepts being discussed
- practice exercises to enhance students' comprehension

The proposed curriculum should ideally build towards the combination of following business + IT skills:

- Customer service and/or integrated value chain best practices
- IT best practices
- Creative and critical thinking, analysis and synthesis
- Communications across disciplines, including leadership, collaboration, and teaming
- Business case development and analysis
- Business project management
- Solution service strategy through understanding value creation
- Solution service design and modeling
- Solution service management and lifecycles to ensure quality

The proposal should include an advisory listing of different general methods and techniques which are recommended to be covered for each skill and corresponding technologies.

Materials submitted by award winning recipients will be made publicly available at no cost to other universities through the IBM Academic Initiative and may be cited on [ibm.com](#) and in workshops, conferences, and publications. Awards will be US \$10,000.

To qualify for these competitive awards, the submitter must be a full-time faculty member at an accredited college or university and a current member of [IBM's Academic Initiative](#) program.

How to submit proposals:

PROCESS: Your proposal should clearly state and outline the goal, approach and benefit of the curriculum. Please denote any open standards/technologies and IBM products/technologies which will be featured. Each proposal should also include an outline plan showing milestones, current funding (if any), the staff involved, and any interested collaborators or sponsors.

Proposals will be reviewed based on the following criteria:

- Impact in demonstrating the problem/solution for Smarter communications IT solutions and open source technologies
- Simplicity of introducing need for IT reference architectures
- Promotion of innovative and systems thinking

- Multi-discipline focus
- Membership in [IBM Academic Initiative](#) program

Submitted entries will be judged by a panel of experts from IBM. IBM assumes no responsibility for computer system, hardware, software, network program, or other errors, failures, delays or malfunctions of any kind, whether human or technical in nature, in the transmission or receipt of emails or proposals.

Note: The proposal review committee will be announced shortly.

After the proposal committee reviews and identifies the winners, the winners will be assigned an IBM liaison who will work and collaborate with their assigned research group, monitor their progress, and provide helpful insight to improve the final submission. Moreover, the needed software and tools will be available to the winners through IBM's Academic Initiative. As this is a collaborative effort, the materials produced by award winners will be shared publicly available at no cost to other universities through the IBM Academic Initiative and may be cited on [ibm.com](#), workshops, conferences, and publications.

To submit a nomination, send an email to: awards@us.ibm.com with the subject line "Smarter Communications Faculty Innovation Award proposal request".

You will receive an e-mail response with a link to a website where you will be able to submit your proposal.

Key dates - deadline times are 11:59 PM U.S. Eastern Time. Carefully note deadlines.

May 16, 2011	Online submission opens. Email requests sent before this date will be rejected.
September 27, 2011	Deadline for initiating a nomination.
October 3, 2011	Deadline for submitting a proposal.
Nov 2011 - Feb 2012	Award winners notified by e-mail.