Skills for the backbone of enterprises

Modern enterprises need an infrastructure that will support large volumes of transactions, whether they’re from a mobile application or the internet. That infrastructure needs to support sub-second response times, be available without interruption and keep the data secure.

80% of the world’s corporate data resides or originates on the IBM z System making it the backbone of enterprise computing and essential in the modern technology driven world.

Whether students pursue careers in enterprise computing or application development, the majority will need an understanding of z Systems. Mobile, analytics, cloud infrastructure and security at large scale require knowledge of enterprise computing.

Enterprise computing requires a unique way of thinking to ensure that applications recover from every error and still can handle the largest numbers of transactions with ease. Students with these highly sought after skills are heavily recruited by the world’s largest companies.

IBM clients and business partners are building their pipeline of talent for the 21st century and want to partner with educators from around the world who are willing to enhance curricula that develop student skills in Enterprise Systems. Read this guide to discover assets you can use in your classroom to build these critical skills and how to connect to the employers that need them.
Audience

The material in this guide is for educators who want to give students the unique skills required for the large systems required by today’s enterprises. Students will learn how the infrastructure affects business results and computer science students will learn how to optimize their applications for large scale transactions.

Read this guide to find an easy way to bring an enterprise perspective to your students through contests, videos, corresponding labs and exercises you can use in your classroom today.

Step 1: Understand the IBM Academic Initiative and the Value of Enterprise Systems

What the IBM Academic Initiative is: http://ibm.biz/AcademicInitiativeVideo

Why Enterprise Computing is vitally important:
- zSystems for Dummies booklet: https://www-01.ibm.com/common/ssi/cgi-bin/ssialias?htmlfid=ZSM03020USEN
- zIQ Videos: https://www.youtube.com/playlist?list=PLezLS0Tuqb5n8RJTYVqa-wVYYs49TbB
- Real World Cases: https://www.youtube.com/playlist?list=PLezLS0Tuqb5CQ66keglYzHvUso8CpcL
- The System Behind the App: https://www.youtube.com/watch?v=jtpqLvenfqY

Explore the many offerings available through the IBM Academic Initiative:
http://onthehub.com/ibm/

Step 2: Incorporate Module into Existing Course

IBM Course: An Introduction to the Mainframe – Existing Course Module Insert

This course helps students gain an understanding of the reasons companies chose mainframe systems to run (and grow) their large scale computing environments. Topics include capacity, scalability, integrity and security, availability, access to large amounts of data, systems management, and autonomic capabilities. Send an e-mail to zSkills@us.ibm.com to request ID’s for you and your students at no cost.

Materials: http://ibm.biz/QuickStartMaterials

Estimated timeframe: One Week

IBM Course: Master the Mainframe Contest

Many high schools, colleges, and universities are incorporating Part 1 of the Master the Mainframe contest into their curriculum. No experience is necessary and no materials to download; simply have your students register for the contest to explore the many facets of what the mainframe can do in a hands on environment. The Mainframe Contest Learning System is always running, so no need to wait for the actual contest to run.

Materials: www.ibm.biz/masterthemainframe

Estimated timeframe: One Week
Step 3: Let the World Know About Your Program

• Many companies are actively looking to recruit students with mainframe skills. We can help them find you by adding your school to our list of Participating Schools; as well as adding you into our Google Map for easy geography searching.
• Send an e-mail to zSkills@us.ibm.com letting us know your school name, a main point of contact, and what you’d like to get started with.
• Have your students post their resumes to our z Jobs Connector so mainframe employers can find them.

Step 4: Get connected and stay connected to our vast community

• Sign up for our IBM Academic Initiative News Reports:
• Follow our IBM Academic Initiative Facebook: https://www.facebook.com/EnterpriseAcademicInitiative/
• Join the Enterprise Computing Community: https://ecc.marist.edu/
• Join the SHARE community: www.share.org

Articles and Case Studies

• Special Report: Mainframe Skills
  IBM Systems Magazine
  https://ibm.biz/BdH8A9
• University of Arkansas
  https://ibm.biz/BdH8AQ
• Syracuse University
  https://ibm.biz/BdH8AT
• Karlsruhe Institute of Technology
  https://ibm.biz/BdH8Ak

Videos

• IBM Academic Initiative YouTube channel
• IBM System z YouTube channel
• Clients describe how the mainframe is essential to their business
  Visa: https://www.youtube.com/watch?v=k0EU9zE WBMA
  Kenya Power: https://www.youtube.com/watch?v=CIx0naUx6Qo
  Travelport: https://www.youtube.com/watch?v=W9Uj6dLqeqQI
• Master the Mainframe
  2014 World Championship: https://www.youtube.com/watch?v=bDcpE_JVeqA
  Lake Brantley High School: https://www.youtube.com/watch?v=SNu1h-hBuBh8
  India Contest: https://www.youtube.com/watch?v=PXv9eaXNExk