

IBM Academic Initiative Program



IBM 学院计划

ibm.com/academic



IBM Academic Initiative

IBM Academic Initiative enables students and faculty at accredited academic institutions to access select IBM resources through a no-charge, self-service program that will provide them with the requisite skills to help distinguish themselves in their career.



AI



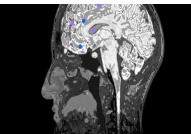
Blockchain



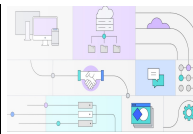
Capstone



Data Science



Healthcare



Automation



Red Hat Academy



Cloud



IBM Engineering



Security



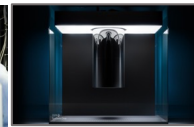
IBM Z



Law



Power Systems



Quantum Computing

**Types of assets
we provide :**

Cloud Access

Enhanced access to the IBM Cloud and select cloud-based resources and applications, such as the Watson APIs and IBM Q experience.

Software

Access to the same software used by our commercial customers leading to practical training for today's jobs.

Courseware

Faculty access to the same courses delivered to our enterprise customers for inclusion in part or whole into existing and new curriculum.

Through the IBM Academic Initiative portal you get...



No-charges for classroom
and non-commercial research



Access to commercial-grade
software



IBM Cloud access and
cloud-based resources



Faculty access to
enterprise-quality courses



Access to IBM digital
badge courses



Central location to find important
IBM content and education sites

Data Science

ibm.com/academic/technology/data-science



Resources

Data Asset eXchange - An online hub for developers and data scientists to find free and open data sets under open data licenses.



Courseware

OpenDS4All - Project created to accelerate the creation of data science curriculum at academic institutions.

IBM Watson Studio – ML/DL made easy - Explore multiple machine learning and deep learning capabilities of IBM Watson Studio.



Data Science



Software

Watson Studio Desktop - Integrated SPSS Modeler functionality to drag-and-drop your way to ML, model building, and data exploration.

ILOG CPLEX Optimization Studio - Analytical decision support toolkit for rapid development and deployment of optimization models using mathematical and constraints programming.



Badges

Data Science Foundations (Level 1) - With this badge, the participant will understand data science skills and profession and discuss different use cases where Data Science has been relevant to solve real problems.

Python for Data Science - The badge earner will be able to write their own Python scripts and perform basic hands-on data analysis using our Jupyter-based lab environment.

Quantum Computing

ibm.com/academic/technology/quantum-computing



Resources

Hello Quantum - A puzzle game designed to teach introductory principles of quantum computing.

IBM Q - Is an industry first initiative to help build universal quantum computers for business and science.



Courseware

Qiskit for Educators - Qiskit is an easy start enabler to learn how quantum software can run on real quantum hardware. Students are trained on the same tools used by scientists and engineers worldwide to help accelerate research towards finding practical applications for quantum computing.



Quantum



Software

Qiskit - An open-source quantum computing framework to help leverage today's quantum processors in research, education, and business.

Qiskit Aqua - Qiskit Aqua contains a library of cross-domain quantum algorithms from which applications for near-term quantum computing can be built.

Cloud

ibm.com/academic/technology/cloud



Resources

Get started with IBM Cloud - Get access to tutorials and materials to help you start building with AI, IoT, data, and mobile services.

Red Hat Academy - Provides high schools and higher education institutions worldwide the technology and support to offer Red Hat courses and exams.



Software

IBM Cloud Lite - Get started for free on the IBM Cloud with your Lite account. No credit card required. No time limit. Access a catalog of more than 40 services, this includes IBM Watson APIs.

IBM Cloud Feature Code - Get enhanced access to the IBM Cloud- the cloud platform that offers a choice of scalable and flexible resources as one dependable experience.



Courseware

Getting started with IBM Cloud - Learners in any job position can get a first look at cloud computing and IBM Cloud.

IBM CloudLabs - With IBM CloudLabs, you'll have a chance to learn how to operate Kubernetes on IBM Cloud by completing three free interactive labs, all on your web browser.



Badges

IBM Cloud Foundations - Foundations of IBM Cloud is a technical certification exam targeted to individuals seeking to test their foundational knowledge of IBM Cloud.

App Modernization Essentials - Through hands-on exercises, badge earners have experience and understanding of containers, container orchestration, microservices architecture, and twelve-factor apps.



Cloud

Security

ibm.com/academic/technology/security



Security



Resources

IBM Security Learning Academy - Get free technical training for IBM Security products. You can explore the course catalog and build your own curriculum by enrolling in courses.

IBM Developer - More than 100 open source programs, a library of knowledge resources, Developer Advocates ready to help, and a global community of developers.



Software

QRadar Community Edition - With all the functionality of QRadars, Community Edition is your place to start or extend your skills and passion for QRadars. We'll guide you along the way, with a set of instructional videos to help you get started.

I2 Analyst's Notebook Premium - Using i2 Analyst's Notebook Premium, it is easy for analysts and investigators to uncover networks, patterns, and trends within increasing volumes of structured and unstructured data.



Courseware

IBM i2 Analyst's Notebook (Tech Support Guide) - In this video series explore i2 Analyst's Notebook in depth. From installation to basic usage and advanced topics.

IBM QRadar SIEM Advanced Topics - Using the skills taught in this course, you will be able to configure processing of uncommon events, work with reference data, and develop custom rules, custom actions, and custom anomaly detection rules using IBM Security QRadar.



Badges

Getting started with Threat Intelligence and Hunting Badge - The badge earner has demonstrated domain knowledge and understanding in adopting practices, methods and tools that relate to activities performed in cyber threat hunting apps.

Power Systems

ibm.com/academic/technology/Power-systems



Resources

Linux on Power Developer Portal - Learn about developing Power architecture, find packages, get access to cloud resources, discover tools and technologies you need to build applications, and connect with your peers and other developers, data scientists, and academics.

IBM Power Systems Academic Cloud - Provides faculty with free remote access to Power Systems for teaching or research activities.



Software

IBM XL Fortran - An advanced, high-performance compiler that can be used to develop complex, computationally intensive programs, including interlanguage calls with C programs.

IBM Visual Insights Training and Interference - Built on cognitive infrastructure, is a new generation of video/image analysis platform.



Courseware

Power Systems Running Linux (Server Administration) - This course introduces basic administrative tasks associated with Linux Servers hosted on Power Systems servers.

AIX Basics - This course enables students to perform everyday tasks using the AIX operating system. The course provides lectures and hands-on labs in an instructor lead course environment.



Power

IBM Z

ibm.com/academic/technology/ibm-z



IBM Z



Resources

LinuxOne Community Cloud - No-charge, open access to an enterprise grade Linux environment with code-patterns and tutorials to get you up and running to quickly solve real problems.

IBM Z Global Student Hub - The Hub is not only a platform for students; it is a learning platform for all. Anyone interested in learning the latest and utmost about enterprise computing and career development is welcome to join our weekly webinars.



Software

IBM Developer for Z - Provides a range of integrated development environments for developing and maintaining IBM z/OS applications.

Zowe - Offers modern interfaces to interact with z/OS and allows you to work with z/OS in a way that it mimics what you experience on cloud platforms today.



Courseware

z/OS Introduction - This is a series of short videos that teaches you about the IBM Z environment. The course starts from the beginning teaching IBM Z basics and the flagship operating system z/OS.

Introduction to the Mainframe - This textbook provides students with the background, knowledge, and skills necessary to begin using basic facilities of a mainframe computer.



Badges

Mainframe Application Programmer (COBOL) - This badge earner has experience with COBOL's code structure and syntax. The individual can efficiently create code to define data types, and to access and manipulate data in files.

Masters the Mainframe - The badge earner has mastered basic mainframe concepts. The earner can perform programming and application developing tasks on the z/OS platform.

IBM Engineering

ibm.com/academic/technology/engineering



Resources

IBM Engineering Help - IBM Engineering practices transparent development. Check out Jazz.net to learn the latest on what we are up to and get help along the way.

IBM Engineering Test Management - Help systems engineers manage quality in software and product development.



Software

IBM Engineering Requirements Management DOORS Next - DOORS Next is a scalable solution to optimize communication, collaboration, and verification of requirements. It enables teams to capture, trace, analyze, and manage changes to requirements while maintaining compliance to regulations and standards.

IBM Engineering Test Management - A collaborative quality management solution that offers comprehensive test planning and test asset management from requirements to defects.



Courseware

Jazz.net Previews - Learn how to use IBM Engineering tools. These guides provide step-by-step instructions on how to use the IBM Engineering solution in a read-only environment. Experts in the videos describe best practices to get started more quickly.



Badges

IBM Watson IoT Online Academy - Explore the IBM Watson IoT online academy. From the fundamentals of IoT to in-depth courses on Watson IoT offerings, portfolio knowledge boosters and more. Get started, sign up, and start earning your first Watson IoT badge.



Engineering

Blockchain

ibm.com/academic/technology/blockchain



Resources

IBM Blockchain - From frictionless supply chain to food we can really trust, learn how industries are revolutionizing business with IBM Blockchain.

Blockchain for Dummies - The Blockchain for Dummies book has use cases describing real blockchain networks, the latest from the IBM Blockchain Platform and more.



Badges

Blockchain Essentials - Earners of this badge have a deep knowledge of blockchain concepts, such as smart contracts, ledgers, business networks, participants, Hyperledger Composer; earners also know how to model and build a simple blockchain network and a JavaScript application that queries the ledger.

IBM Blockchain Foundations for Developers - The badge earner develops an understanding of Blockchain principles and practices and how they can be applied in a business environment.



Courseware

Blockchain Essentials - Blockchain technology provides the basis for a dynamic shared ledger that can be applied to save time when recording transactions between parties, remove costs associated with intermediaries, and reduce risks of fraud and tampering.

Blockchain Foundations for Developers - Get a more detailed picture of the components and structures of blockchain business networks, such as ledgers, smart contracts, consensus, certificate authorities, security, roles and more.



Blockchain

Additional Resources

ibm.com/academic/additional-resources

Open P-TECH

Technologies and jobs are changing faster than educational systems. Open P-TECH helps students and educators bridge this gap. Open P-TECH offers you free digital learning about the tech skills of tomorrow!

Red Hat Academy

Provides high schools and higher education institutions worldwide the technology and support to offer Red Hat courses and exams.

University Guest Lectures

Access Guest Lectures delivered by our IBM Academic Ambassadors. Search, based on topic, duration, language. With over 100 talks from some of the best IBM minds ranging from technical topics to how we are using these technologies, to solving our client's problems and more.

IBM Skills Academy

A skills-oriented training program to empower students from different backgrounds with the skills needed to excel in today's high-demand technologies.

IBM Design Thinking

Experience IBM Enterprise Design Thinking, a framework that aligns multi-disciplinary teams around the real needs of their users. When teams apply these scalable methods, they're able to move faster and deliver differentiated outcomes every time.

IBM Redbooks

IBM Redbooks develop and deliver skills, technical know-how, and materials to IBM technical professionals, business partners, clients, and the marketplace in general. Our value-add information products address product, platform, and solution perspectives.

