STUDENT GUIDE

DIGITAL BADGES AND COURSES

RICHFIELD

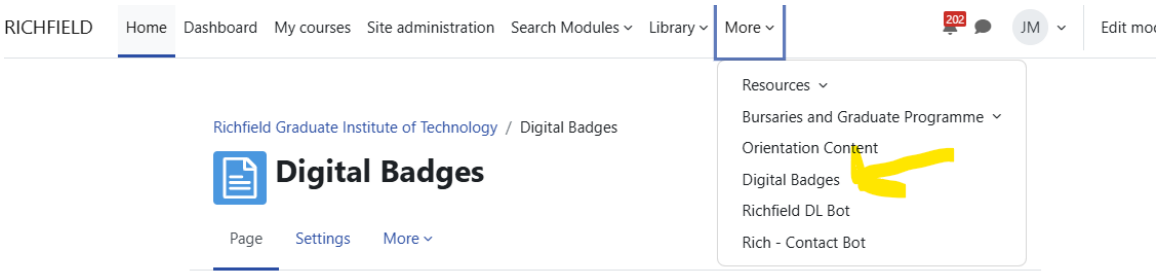
Contents

BADGES AND INDUSTRY COURSES

Richfield has partnered with leading IT Tech giants to offer industry courses to our students at no extra cost. This partnership bridges the skills-gap between academia and the IT industry, thus equipping the students with the required skillset and hands-on practical knowledge to navigate the field of Information Technology. The courses are designed to encourage continuous learning and the badges can be easily shared on digital platforms, enhancing professional visibility.

A badge will be issued upon completion of each of the courses. A link to claim the badge will be available at the end of each course which will be issued via Credly. You are advised to check your “junk/spam/other” folder in your Richfield mailbox.

PLEASE NOTE THAT YOU CAN ONLY ACCESS/SIGNUP FOR THESE COURSES USING YOUR RICHFIELD EMAIL ADDRESS.



1. AWS Academy Digital Badges and Courses

AWS Learning badges are valuable credentials that showcase your knowledge and skills in specific AWS courses such as Cloud Computing, Solutions Architecture etc. These digital badges can be easily shared on social networks, helping you stand out to recruiters and prospective hiring managers. Additionally, earning and sharing AWS digital badges is

completely free, making them an accessible way to validate your expertise in the cloud domain.

HOW TO ACCESS AWS COURSES

Sign up for courses using AWS signup form link on Moodle or alternatively using the link below:

https://forms.office.com/r/85pqt3Ad1k

Once you sign up, you will receive a link from AWS to signup on AWS Academy and canvas platform within 24hrs - 48hrs.

Some of the courses within AWS Academy are briefly explained below:

A. AWS Academy Cloud Foundations

The AWS Academy Cloud foundations provide an introduction to cloud computing concepts and AWS core services. Students who take this course will understand and be exposed to the basics of cloud computing, AWS services like EC2, S3, RDS and lambda. They will also understand Cloud security, compliance, AWS pricing and cost management as well as Serverless computing.

PS: The AWS Cloud Foundations course is the prerequisite course that needs to be completed first before enrolling for any other AWS courses.

B. AWS Academy Cloud Architecting

This course focuses on how to design cloud solutions using AWS services. Students will understand AWS architecture best practices, and how to design highly available, fault-tolerance and scalable applications. Furthermore, students will also understand the concept of optimising and automating AWS architecture as well as managing AWS security services and AWS cost optimisation

C. AWS Academy Machine Learning

This course introduces students to the fundamentals of machine learning concepts and practical use cases for deploying models on AWS. Students will also be exposed to the various types of machine learning and how to use AWS services like Amazon SageMaker for ML model training and deployment. This course also teaches students model optimisation, hyperparameter tuning as well as managing / storing data for machine learning.

D. AWS Academy Data Engineering (Data Analytics)

The Data Engineering course focuses on how to collect, store, process, and analyze data using AWS services. Students are exposed to Data ingestion, storage, and processing using AWS services like Kinesis, Redshift, and Glue. They will also learn how to build data lakes on AWS, querying and analysing large dataset as well as using AWS Quickset Sight for data visualisation.

E. AWS Academy Cloud Operations

This module covers operational excellence on AWS, including best practices for managing and monitoring cloud environment / infrastructure, incident management and response on AWS. Students will also learn how to automate operational tasks using AWS Lambda and CloudWatch and AWS service health and performance monitoring.

2. IBM Academy Digital Badges and Courses

The IBM Professional Certification Program provides industry-recognized credentials focused on IBM technologies and solutions. These courses are categorized into different levels, such as Entry, Intermediate, and Advanced, aligning with the candidate's experience and expertise. They cover a wide range of areas, including cloud computing, data science, cybersecurity, and more.

HOW TO ACCESS IBM COURSES

Sign up for courses on IBM website using the link BELOW:

https://www.ibm.com/training/credentials

Some of the courses within IBM Academy are briefly explained below:

A. IBM Data Science Professional Certificate

This course covers essential data science tools, techniques, and methodologies. Students will be exposed to data manipulation and analysis with Python, Pandas and NumPy; Data visualisation using Matplotlib and Seaborn as well as Machine learning techniques. They will also be working with IBM Watson for AI-driven tasks.

B. IBM AI Engineering Professional Certificate

This course focuses on AI and machine learning techniques. Students will learn how to build AI models with PyTorch, TensorFlow and Keras. They will also be exposed to the concepts of neural networks and deep learning, and how to use AI models for NLP and computer vision. Model evaluation and deployment using IBM cloud services are also covered in this course.

C. IBM Cybersecurity Analyst Professional Certificate

This course prepares individuals for entry-level roles in cybersecurity. It exposes students to the fundamentals of cybersecurity, security monitoring and incident response, vulnerability management and network security principles. Furthermore, students are exposed to hands-on experience with IBM's ORadar security information and Event Management tool.

D. IBM Cloud Essentials

This course provides foundational knowledge of cloud computing on the IBM Cloud platform. Students are exposed to the basics of cloud architecture, virtual machines, cloud storage and networking in IBM Cloud. It also exposes students to IBM cloud services such as AI, Blockchain, and IOT as well as using IBM Cloud CLI for deployment and orchestration.

E. IBM Applied AI Professional Certificate

This course focuses on practical AI applications using IBM's AI services. Students will learn how to build AI models with IBM Watson, NLP applications. They will also understand AI ethics and how to deploy AI solutions in real-world use cases.

3. Cisco Networking Academy

The academy offers a wide range of courses covering topics such as networking, cybersecurity, programming, and the Internet of Things (IoT). These courses are designed to equip students with practical skills applicable in real-world scenarios. Cisco Networking Academy has played a pivotal role in bridging the IT skills gap, offering educational opportunities to diverse populations, including underserved communities. By aligning its curriculum with industry demands, the academy ensures that learners are well-prepared for the evolving technological landscape

HOW TO ACCESS CISCO COURSES

Sign up for courses on Cisco Networking Academy website using the link BELOW:

https://www.netacad.com/

Some of the courses within Cisco Networking Academy are briefly explained below:

A. Cisco Certified Network Associate (CCNA)

This course provides foundational knowledge in networking concepts. It exposes students to the concepts of IP addressing, subnetting and routing protocols. It also teaches students how to configure and manage routers/ switches. Furthermore, students will understand the basics of network security and firewall configurations as well as how to troubleshoot and resolve network issues.

B. Cisco Cybersecurity Essentials

The Cybersecurity essentials course introduces students to key cybersecurity concepts and threats. They will also understand Cybersecurity principles – CIA Triad, encryption and also recognise various cybersecurity threat. It also introduces students to network security protocols and basic incident response techniques

C. Cisco DevNet Associate

This course focuses on network automation and software development for network engineers. Students will understand the concept of automation of network tasks using Python and APIs as well as DevOps practices and CI/CD pipelines for networking. They

will also work with Cisco DevNet tools and how to automate network configurations with SDN technologies.

D. Cisco CyberOps Associate

This course prepares individuals for a career in cybersecurity operations. Students will understand security operations center activities, incident detection / response, Threat intelligence and monitoring as well as using SIEM systems for real-time threat analysis.

E. Cisco IoT Fundamentals

This course provides students with the knowledge of the Internet of Things (IoT) technologies and applications. Students will understand IoT architecture and protocols as well as IoT device configuration and network integration. It also teach students on how to manage IoT networks and security, and expose them to real-world IoT use cases (smart cities, industrial IoT).

F. PCAP – Programming Essentials in Python

This course introduces learners to Python programming, covering essential programming concepts and techniques. It prepares students for the Python Certified Associate Programmer (PCAP) certification. They will learn how to write Python scripts, functions, and how to work with Python data structures (lists, dictionaries, sets, tuples). Students will also learn control flow statements, handling exceptions and file. Finally, they will also the concept of Object Oriented Programming in Python and how to debug/test Python code.

G. Python for Cybersecurity

This course focuses on leveraging Python for cybersecurity operations. It equips learners with skills to automate security tasks, analyze data, and improve incident response. They will learn how to write Python scripts for network scanning/ monitoring, automating security-related tasks. Furthermore, they will be exposed to Data Analysis using Python libraries as well as developing Python tools for cybersecurity investigations

4. Salesforce Academy Digital Badges and Courses

Salesforce Academy, also known as Trailhead Academy, is Salesforce's official training program designed to equip individuals with the skills needed to effectively utilize Salesforce products and services. It offers a variety of learning options, including self-paced online modules, expert-led classes, catering to different learning preferences and career goals. Through Trailhead Academy, learners can earn credentials and certifications that validate their expertise, enhancing their professional profiles and opening up opportunities within the Salesforce ecosystem.

HOW TO ACCESS SALESFORCE COURSES

Sign up for courses on Salesforce Academy website using the link BELOW:

https://trailheadacademy.salesforce.com/

Some of the courses within the Salesforce Academy are briefly explained below:

A. Salesforce Administrator

This course covers foundational skills for managing the Salesforce CRM platform.

B. Salesforce Developer

The salesforce developer course provides in-depth knowledge for developing custom applications on Salesforce.

C. Salesforce Marketing Cloud Specialist

This course focuses on marketing automation and customer engagement through Salesforce.

D. Salesforce Platform App Builder

This course provides skills to build apps on the Salesforce platform using a no-code/low-code approach.

E. Salesforce Business Analyst

This covers techniques for gathering business requirements and configuring Salesforce to meet business needs.

5. Oracle Academy Digital Badges and Courses

Oracle Academy is Oracle Corporation's global educational initiative aimed at advancing computing education worldwide. It provides academic institutions with free resources, including comprehensive curricula, access to Oracle Cloud technologies, software licenses, and professional development opportunities. These offerings are designed to equip students with practical skills and knowledge in areas such as Java programming, database management, and cloud computing, preparing them for successful careers in technology.

HOW TO ACCESS ORACLE ACADEMY COURSES

Sign up for courses on Salesforce Academy website using the link BELOW:

https://academy.oracle.com/en/about-mission.html

Some of the courses within the Oracle Academy are briefly explained below:

A. Oracle Database Foundations

This course introduces learners to relational database concepts and Oracle SQL, equipping them with essential skills to manage data in a database environment. Students will learn the fundamentals of database systems; how to write SQL queries to retrieve and manipulate data; data modelling and relational database design, as well as how to create and manage dataset objects. Finally, they will also understand oracle database architecture.

B. Oracle Java Foundations

This course provides a solid foundation in Java programming, focusing on the fundamental concepts and skills for software development. They will learn OOP principles, and how to write basic java applications. They will also understand variables, data types, operators, control structures and basic problem-solving techniques using JAVA

C. Oracle Cloud Infrastructure Foundations

This course introduces Oracle Cloud Infrastructure (OCI) and covers essential cloud services such as compute, storage, networking, and security. Students will understand cloud computing and Oracle Cloud services, and how to use OCU for cloud storage, virtual networking and compute resources. Furthermore,, students will also understand how to configure security and manage cloud identities as well as how to deploy applications and manage resources in OCI.

D. Oracle Application Development Foundations

Provides foundational knowledge on developing and deploying applications on Oracle platforms using Java and other development tools. Students will learn how to build and deploy Java-based applications; how to use Oracle Application Express (APEX) for rapid application development as well as Web application development and UI design. Also, they will be exposed to Integrating applications with Oracle Database and how to debug and optimise applications

E. Oracle Java Programming

An advanced course that builds on Java Foundations, introducing more complex programming concepts and problem-solving strategies using Java. Students are exposed to advanced object-oriented programming in Java; Exception handling, file I/O, and multi-threading; Working with data structures (lists, sets, maps); Creating GUI applications using JavaFX as well as designing and implementing real-world Java applications