

# AI Generated Lecture Notes

**MCQ Difficulty:** Medium

**Total MCQs:** 10

## Summary & Notes

This lecture served as the official launch of the six-week internship, covering platform orientation and the initial technical session.

### 1. Short, Clear Summary (5–6 lines)

This session focused on onboarding students to the IBM SkillsBuild Learning Management System (LMS), requiring immediate registration using their AACTE registered email and a default password (`Aact@123`). Students must ensure their profile reflects the mandatory DZT Organization to track progress and receive credit. All participants must complete the "Aidinet Artificial Intelligence" learning plan and set up a Credly account to claim digital credentials, mandatory for the final completion certificate. The technical segment introduced AI fundamentals, defining ML, DL, and Generative AI, while emphasizing the requirement for students to begin planning their mandatory, individual AI-based projects.

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### 2. Key Concepts (Bullet Points)

#### I. Platform & Administration Requirements

- **Mandatory LMS Registration:** Must use the AACTE registered email ID. Default password is `Aact@123`.
- **Organization Check:** Students must be enrolled under the DZT organization (Aidinet Foundation). Students under "Open Skills Build" are acceptable but must be manually tracked; other organizations (like CSR Box) are not accepted.
- **Proof of Registration:** Required to take and upload two screenshots to the Telegram group:
  1. IBM SkillsBuild Profile (showing DZT organization).
  2. Completion Certificate for the demo course "Communicating with Impact."
- **Mandatory Coursework:** Completion of all required courses within the "Aidinet Artificial Intelligence" Learning Plan (suggested completion in two weeks).

#### II. Credentialing and Certification

- **Credly:** Mandatory platform setup (using the \*same IBM SkillsBuild registered email) required to claim and showcase industry-recognized digital credentials.
- **Final Certification Eligibility:** Contingent on completing all mandatory courses, achieving 100% progress in the learning plan, claiming the Credly credential, and submitting the final individual project.

#### III. Artificial Intelligence Fundamentals

- **AI Definition:** Creating intelligent machines that can mimic human actions (think, learn, problem-solve).
- **Core Capabilities of AI:** Problem-solving (e.g., Google Maps finding the shortest route), learning from data (e.g., Spotify recommendations), and making decisions.
- **AI vs. Traditional Programming:** Traditional programming relies on predefined rules (Algorithm + Input = Output); Machine Learning/AI relies on data and learning (Input + Output = Algorithm/Model).
- **AI Landscape:** Artificial Intelligence (broad concept) > Machine Learning (ML, learns from data) > Deep Learning (DL, uses neural networks, inspired by the human brain, better for unstructured data/images) > Generative AI (Gen AI, generates new content/data, e.g., using GANs).
- **Mandatory Project:** Students must complete one individual project using AI/ML techniques.

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### 3. Exam-Oriented Notes in Simple Language

#### Part A: Mandatory Setup and Certification

1. How do I log into the IBM SkillsBuild LMS?

- Email: Use your AACTE registered email only.
- Password: The default password is `Aact@123`.
- Important: You can change this password after your first login.

2. What is the most critical check after registration?

- You must check your profile and ensure your Sponsored Organization is listed as DZT Organization (Aidinet Foundation). If it shows any other organization, you must re-register using a new email address.

3. What are the mandatory coursework items?

- Demo Course: Complete the short course "Communicating with Impact" immediately.
- Learning Plan: Complete all mandatory courses under the "Aidinet Artificial Intelligence" learning plan (Technical Course tab).
- Timeline: Aim to complete the entire AI learning plan within the next two weeks.

4. Why is Credly important?

- Credly is where you claim your industry-recognized digital badge (credential) once you finish the learning plan.
- Crucial Step: You must set up your Credly account using the exact same email used for IBM SkillsBuild.
- Eligibility: Claiming this Credly credential is mandatory for receiving the final internship completion certificate.

5. What is the project requirement?

- You must complete one individual project using AI/ML techniques. You must start planning this project immediately.

## Part B: Introduction to AI and Machine Learning

1. What is Artificial Intelligence (AI)?

- AI is making computers smart so they can act like humans—they can think, learn, and solve problems.
- \*Examples:• Facial recognition, voice assistants, getting traffic predictions from Google Maps.

2. What are the three things AI can do?

- Problem-Solving
- Learning from Data
- Making Decisions

3. How is AI different from Traditional Programming?

- Feature | Traditional Programming (e.g., Calculator) | Machine Learning (AI)
- :--- | :--- | :---
- \*\*Input\*\* | Data (Input) + Rules (Algorithm) | Data (Input) + Results (Output)
- \*\*Output\*\* | The Answer | The Model (Rules/Algorithm)
- \*In short:• Traditional programming is told \*how• to solve a problem; ML learns \*how• to solve the problem by looking at examples.

4. Explain the relationship between AI, ML, and DL.

- AI is the largest area (the overall goal).
- Machine Learning (ML): A way to achieve AI by making computers learn from data and find patterns.
- Deep Learning (DL): A subset of ML that uses complex neural networks (like a biological brain) with many hidden layers. DL is better for high accuracy and unstructured data (images, video).
- Generative AI: The newest subset that can create entirely new (or "fake") content, like new images or text, based on training data.

5. Which AI job roles were discussed?

- Data Scientist: Focuses on analyzing data and finding hidden patterns to build models.
- Big Data Engineer: Focuses on handling, managing, and storing huge volumes of data.
- Research Scientist: Works on advanced, cutting-edge AI algorithms and experiments.

## Multiple Choice Questions

### Medium-Level Multiple-Choice Questions

1. According to the lecture, why is it mandatory for students to use their AACTE registered email ID when logging into the LMS platform?

- A. It provides access to the optional professional development courses.
- B. The onboarding process was pre-done using student data obtained directly from the AACTE portal.
- C. It ensures the default password (Aa@1234) is automatically reset upon first login.
- D. It is required to successfully link the SkillsBuild account to the Credly platform.

Correct Answer: B. The onboarding process was pre-done using student data obtained directly from the AACTE portal.

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2. If a student's IBM SkillsBuild profile reflects an organization like "CSR box 1m" or "AKDME" instead of DZT or Open Skills Build, what is the primary consequence mentioned by the speaker?

- A. They must change their default password immediately for security reasons.
- B. They will only receive a participation certificate, regardless of course completion.
- C. Their learning progress cannot be tracked, making them ineligible for the final completion certificate.
- D. They must contact the Tech Team immediately to manually transfer their registration.

Correct Answer: C. Their learning progress cannot be tracked, making them ineligible for the final completion certificate.

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3. To successfully claim the digital credential badge through the Credly platform after completing the required courses, what crucial step involving email IDs must the student ensure?

- A. The student must use a unique, non-Gmail ID for Credly registration.
- B. The IBM SkillsBuild registered email ID and the Credly registration email ID must be identical.
- C. The Credly account must be set up after the final project submission.
- D. They must provide their organization name (DZT) during Credly registration.

Correct Answer: B. The IBM SkillsBuild registered email ID and the Credly registration email ID must be identical.

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4. After reviewing the content of a short course, such as 'Communicating with Impact,' which sequence of actions must a student perform to correctly change the course status to the "green tick mark as completed" in the desktop version?

- A. Click "Next" repeatedly until the final quiz is submitted.
- B. Click the previous browser tab, select the pop-up option "Mark Complete," and then click "Submit."
- C. Download the course material and save it as a PDF, then refresh the browser.
- D. Click the 'Action' button and select 'View Completion Certificate' immediately.

Correct Answer: B. Click the previous browser tab, select the pop-up option "Mark Complete," and then click "Submit."

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5. What are the three necessary sequential steps required to complete the IBM SkillsBuild registration process after a student clicks 'Sign up with Google'?

- A. Profile Setup, Course Selection, Final Submission.
- B. Terms and Conditions, Additional Information, Basic Information.
- C. Basic Information, Additional Information, Terms and Condition.

D. Google Sign-up, Email Verification, Password Creation.

Correct Answer: C. Basic Information, Additional Information, Terms and Condition.

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6. The lecture introduced the landscape of modern AI, visually depicting the relationship between Artificial Intelligence (AI), Machine Learning (ML), and Deep Learning (DL). Which statement correctly describes this conceptual hierarchy?

A. Deep Learning is the largest field, encompassing both AI and ML.

B. Artificial Intelligence is the overarching system, containing Machine Learning as a subset, which in turn contains Deep Learning.

C. Machine Learning and Deep Learning are mutually exclusive, both serving the broader goals of AI.

D. AI, ML, and DL are sequential historical stages in technology and are no longer subsets of one another.

Correct Answer: B. Artificial Intelligence is the overarching system, containing Machine Learning as a subset, which in turn contains Deep Learning.

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7. Completing all the mandatory courses within the "Edinut Artificial Intelligence" learning plan leads directly to which subsequent mandatory step mentioned by the speaker?

A. Submitting the final project to the technical team for evaluation.

B. Receiving the offer letter via email from the AACTE.

C. Achieving 100% progress on the bar and claiming the Artificial Intelligence fundamental credential via Credly.

D. Automatically gaining access to all "Professional Development" courses.

Correct Answer: C. Achieving 100% progress on the bar and claiming the Artificial Intelligence fundamental credential via Credly.

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8. What key feature distinguishes Generative AI, as introduced in the lecture, from traditional Machine Learning models (like those used for image classification)?

A. Generative AI requires significantly less data to train the model.

B. Generative AI is primarily used for handling traditional, structured data only.

C. Generative AI has the unique capability to produce novel content, like images or text, that did not exist previously.

D. Generative AI relies solely on pre-defined rules and established logical operations.

Correct Answer: C. Generative AI has the unique capability to produce novel content, like images or text, that did not exist previously.

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9. Under the "Recommended Courses" tab in the LMS platform, what are the two main sub-tabs reflecting course categories, and which one is strictly mandatory for all students?

A. Technical Course and Professional Development; Technical Course is mandatory.

B. Optional Courses and Advanced Certificates; Advanced Certificates is mandatory.

C. IBM Courses and Partner Courses; IBM Courses is mandatory.

D. Project Submission and Learning Modules; Learning Modules is mandatory.

Correct Answer: A. Technical Course and Professional Development; Technical Course is mandatory.

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10. The lecture identified 'problem solving' and 'making decisions' as core tasks AI can perform. Which application discussed provided the clearest example of AI optimizing a solution by analyzing conditions and determining the

"shortest route"?

- A. Spotify personalized playlist recommendations.
- B. Facial recognition for mobile phone security.
- C. Google Maps traffic prediction and route optimization.
- D. The robot teacher 'Iris' monitoring student behavior.

Correct Answer: C. Google Maps traffic prediction and route optimization.