Cognizant Academy

Generation Cognizant (GenC) Learner Handbook

DevOps via Azure Core – v2

Why do we need this GenC learning Program?

Gen C learning program engages young talents with a comprehensive learning pathway, giving the millennials an opportunity to interact with Subject Matter Experts (SME), understand the corporate environment, and groom themselves.

Cognizant emphasizes on Learner Autonomy where students take charge of their own learning, with the available tools and resources. More focus is on “learning” than “teaching”. Get ready to embark your own learning adventure!

Program at a glance

Learning consisting of below milestones:

- Stage 1 - Devops via Azure Basics
  - Fundamentals of Infra & Cloud (Day 1 to 7)
  - Azure Fundamentals (Day 8 to 18)
  - Qualifier Assessment (Day 19 to 20)
- Stage 2 - Devops via Azure Advanced
  - DevOps Core (Day 21 to 54)
  - Cloud Labs & Interim Evaluation (Day 55 to 61)
  - DevOps Specialized Training (Day 62 to 66)
  - Cloud Labs & Final Evaluation (Day 67 to 75)

Program Highlights

- The complete learning journey is formalized using adult learning principles, where problem solving and applying the skills gained are given more importance than conceptual learning.
- Learner Autonomy is encouraged via Flipped Classroom, where the learning platform offers world class learning resources, and students would not be constrained by tutelage of an instructor.
- Get mentored by SME, whose motivation and guidance will help you accelerate in the learning journey.
- This program is applicable to Interns as well as GEN Cs.

Learning Journey with Flipped Classroom

This program encourages you to be more autonomous learners during guided self-learning hours, completing the learning objectives on your own pace and style, and get ready for the hands-on practice time.

The complete learning path is set in the GEN C Learn Platform, which you can login with SSO.

Flipped Classroom

Self-Learning Time
- Go through the Learning Objectives
- Try to accomplish the learning objectives by accessing learning resources

Practice Time
- Get guidance from Subject Matter Expert
- Deep dive on to the learning concepts and solve a problem statement

Recommended Program Sequence

The learning journey contains below stages.

Stage 1- Devops via Azure Basics

Day 1 to 7
- Fundamentals of Infra & Cloud

Day 8 to 20
- Azure Fundamentals & Cloud Labs
- **Qualifier Assessment**

Stage 2 - Devops via Azure Advanced

Day 21 to 54
- DevOps Core
- Gen AI Learnings

Day 55 to 61
- Cloud Labs
- **Interim Assessment + Technical Evaluation**

Day 62 to 66
- DevOps Specialized Training

Day 67 to 75
- Cloud Labs
- **Final Assessment + Final Technical Evaluation**

Key Learning Components of the Program

Cognizant has collaborated with Udemy to provide world class learning videos for the evolving future of work. These Udemy programs are woven into a learning path, empowering you to plan and learn at your style.

The program also connects you with Subject Matter Experts (SMEs) to get the professional guidance on your queries in the learning journey.

The program doesn't ONLY concentrate on the technical skilling, but also on the shaping up of the Behavioral skills. **Behavioral learning** would be done in ILT mode, with few Self-paced learning modules too.

Evaluation Model

The program continuously evaluates if you can apply those self-learnt skills to solve a real-time business problem. Depicted below are the four key learning components, which are distributed across the learning journey for the purpose of continuous evaluation.

- Interim Evaluation (Assessment + Technical) through Video Interview
- Final Evaluation (Assessment + Technical) through Video Interview

The above evaluation components will attribute to the Performance Health Status (PHS) of a GenC. Additional Learning Components like Hands-On, Code Challenges and ICTs will help you to enhance your expertise level.

Interim and Final Assessment

Below is the Evaluation Structure for GenC Learning Journey

The interim evaluation will be held halfway through the learning journey, while the final evaluation will take place at the end of the learning journey.

During the interim evaluation, the GenC will be interviewed by a Technical Subject Matter Expert (SME) from the Business Unit (BU) to assess your knowledge through a technical discussion.

During the final evaluation, the GenC will again be interviewed by a Technical SME from the BU to assess their knowledge through a technical discussion.

Program Completion Criteria

Stage 1 (Pre-requisites)

Gating Criteria: Qualifier Assessment

Stage 2 & Beyond (Advanced Skills)

Gating Criteria: Performance Health Status is Green

GenC/Intern Training	Evaluation Components	Pass Criteria	Evaluation Done By
Performance Health Status -PHS (only From Stage-2)	Interim Evaluation (Assessment + Technical)	Green,1 Attempt	BU SME
	Final Evaluation (Assessment + Technical)	Green, 2 Attempts*	

Outcome of Interim / Final evaluation will be RED, AMBER or GREEN status

Note: 100% Completion of Hands on in Stage 1 is mandatory for qualifier assessment and 100% Completion of Hands On in Stage 2 is mandatory for interim / final evaluation eligibility.

Key Check Point Intervals in the Learning Journey

Progressing to Stage 2 depends on clearing the qualifier assessment after stage1. Candidates who do not clear the Stage 1 Qualifier will be terminated from the Internship. However, based on the demand and later needs, they will be considered for the CSD mode of training.

Subsequent stages learning journey, your progress will be measured. On the below check point intervals, your overall Performance Health Score will be calculated as on date, and the RAG status will be arrived.

Table 3 – Check Point Intervals

Check points	Interpreting Status
Interim Evaluations (Technical and Assessment)	- Green - On Track for Graduation - Red /Amber - There will not be any re-attempts given
Final Evaluations (Technical and Assessment)	- Green - On Track for Graduation - Red /Amber – Only 2 attempts are given *. **Note:** If student fails after the applicable re-attempts, they will be considered as “Not-Graduated”.

Icebreaker

Icebreaker session will be conducted for a duration of initial **5 days.** During the session, various topics related to Corporate Induction, Talent Management, Cognizant Agenda on Core Values, Leader Talks, Alumni, BU Mentor connects will be covered. Followed by icebreaker, technical training will kick start.

Following sessions will be covered during the **5 days** of icebreaker.

- Corporate Induction
- Talent Manager Connect
- Cognizant Agenda Sessions on Core Values
- Leader Talks (Academy) and many more…

A recommended day-wise schedule is provided below for the learning, with the learning content for the day, the practice hands-on and extended hands-on to be done for the day or any other activities are listed. Few days might be interleaved to accommodate the extension due to Behavioral Training.

Introduction

AI Accelerate is a comprehensive program designed to empower learners with the knowledge and skills needed to harness the transformative potential of Artificial Intelligence (AI). This handbook serves as a guide, providing essential information and resources to help learners navigate through the program successfully. From understanding the fundamentals of AI to apply the advanced concepts in real-world scenarios. AI Accelerate is your gateway to unlock the power of AI and shaping the future of technology.

Program overview.

AI Accelerate offers a learning opportunity, allowing GenCs to engage learning through the self-paced learning, Expert connect, and Knowledge assessment to measure the skills.

Focus areas

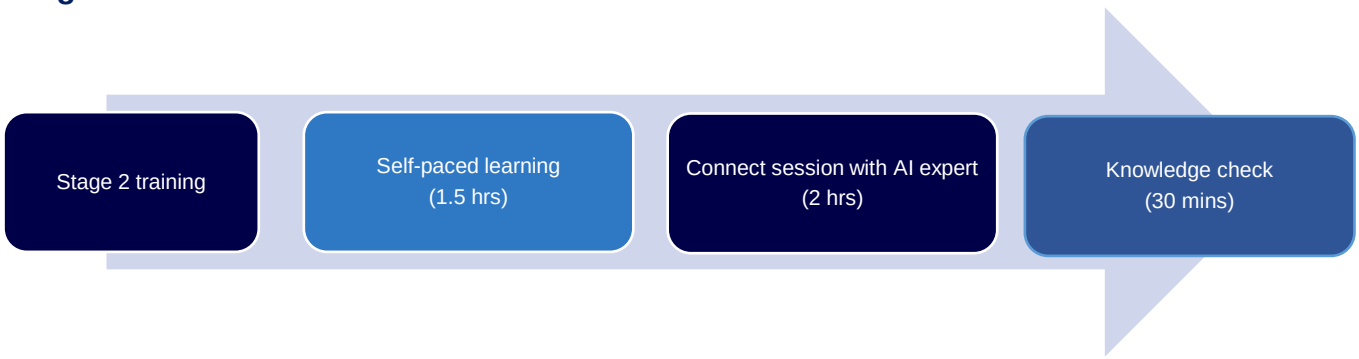
- **Learning:** GenCs will have access to curated content and resources that cover a wide range of topics related to AI, including best practices, and case studies. This learning aspect aims to deepen GenCs understanding of AI and its applications in various industries.
- **Expert connect:** GenCs will have the opportunity to connect with expert in the field of AI. This expert will provide guidance, support, and insights to help GenCs navigate their learning journey and gain valuable insights into the industry.
- **Practice sessions:** GenCs can practice the use cases provided sessions that are designed to reinforce their learning and help them apply their knowledge in real-world scenarios. These sessions will provide GenCs with hands-on experience and practical skills that are essential for success in the field of AI.

Performance outcomes

Upon completing the self-paced learning component of AI Accelerate GenCs are expected to achieve the following performance outcomes:

- GenCs will demonstrate a thorough understanding of the fundamentals of AI, including key concepts, terminology, and principles.
- GenCs will be able to apply AI concepts and techniques to solve real-world problems, demonstrating their ability to analyze, design, and implement AI solutions.
- GenCs will develop and apply critical thinking and problem-solving skills in the context of AI, enabling them to identify, analyze, and address complex challenges.
- GenCs will collaborate effectively with peers, mentors, and industry experts to achieve common goals and contribute to the advancement of AI knowledge and practice.

Program workflow



Schedule – Stage 1: Fundamentals of Infra & Cloud

Day 1 to Day 7 will be focusing on Fundamentals of Infra & Cloud.

Udemy learning is recommended in the Platform to understand the fundamental concepts. Apply the concepts learned and solve the Hands-on as recommended below.

Day 1 to 7

Continuous Learning: Technical Enablement

Learn the Fundamentals of Infra & Cloud through the below self-paced courses.

- Linux Administration Bootcamp: Go from Beginner to Advanced
- Linux Shell Scripting: A Project-Based Approach to Learning

The following topics will be handled by the trainer through Instructor led training.

- Linux (Instructor led training)
- Cloud Fundamentals (Instructor led training)
- Shell Scripting Fundamentals (Instructor led training)

Note: Recap the python learning topic if in case you missed to cover any topics during the delta session

- The Complete Python Bootcamp From Zero to Hero in Python

Schedule – Stage 1: Azure Fundamentals

Day 8 to 14 will be focusing on **Azure Fundamentals.**

Day 8 to 14

Learn the Fundamentals of Azure fundamentals – Azure Devops basics through the below Udemy courses.

Continuous Learning: Technical Enablement (Azure)

Azure DevOps & Cloud Basics (Day 8 to 14)

Continuous Learning: Technical Enablement

Learn the Fundamentals of Azure DevOps & Cloud through the below Udemy courses.

- Microsoft Azure - Beginner's Guide + AZ-900
- AZ-104 Microsoft Azure Administrator Certification

The following topic will be handled by the trainer through Instructor led training

- Azure Fundamentals (Instructor led training)

Cloud Lab (Day 15 to 18)

Continuous Learning: Cloud Hands-on

You will be working with BU SMEs to practice the Cloud hands-on. Necessary Use Cases will be given by BU. (Refer **Azure Hands on Use Cases**)

- **BU Hands on**

Note: On your **Day 17,** you will be taking Qualifier Mock

Qualifier Mock

Day 19 & 20

Qualifier of Stage 1

Stage 1 Qualifier (GenC will move on to Stage 2 training (DevOps Core skills) only if you clear this Qualifier Assessment.
Knowledge Based Assessment on Skills Fundamentals of Infra and Cloud + Azure Fundamentals with passing score >=70%

Schedule – Stage 2: DevOps Core

Days 21 to 61 will be focusing on **DevOps Core.**

Day 21 to 53

Continuous Learning: Technical Enablement

Learn the Fundamentals of Devops and related LAB skills through the below self-paced courses.

- DevOps: CI/CD with Jenkins pipelines, Maven, Gradle
- Jenkins 2 Bootcamp: Fully Automate Builds to Deployment 2020
- Build+Deploy+Test with Jenkins 2.0
- Ansible for the Absolute Beginner - Hands-On - DevOps
- Ansible Advanced - Hands-On - DevOps
- Git Complete: The definitive, step-by-step guide to Git
- Maven Quick Start: A Fast Introduction to Maven by Example
- Understanding Jira for users, managers and admins

- Learn JIRA with real-world examples (+Confluence bonus)
- The Complete Splunk Beginner Course
- Splunk - Beginner to Architect

The following topics will be handled by the trainer through Instructor led training

- Basics of SDLC & DevOps (Instructor led training)
- Overview of CI/CD (Instructor led training)
- Jenkins Fundamentals (Instructor led training)
- Ansible Fundamentals (Instructor led training)
- GIT Fundamentals (Instructor led training)
- Maven Fundamentals (Instructor led training)
- Jira Overview (Instructor led training)
- Splunk Fundamentals (Instructor led training)

The following topics will be handled by the trainer through Instructor led training

- Troubleshooting Basics
- Advanced Troubleshooting and Tools
- Monitoring the Health of Your Application

Note: During your day 24, you are expected to enroll the below GenAI course and complete the following topics.

GenAI (On your Day 24th)

Continuous Learning: Technical Enablement

Program completion criteria

Everyone must register for the following e-learning course on **C-Learn** and complete a KBA assessment on Moodle to successfully finish this program.

Online learning: C-Learn

Activity Code: **ELRNG01863**

Fundamentals of Generative AI [101-Basics]

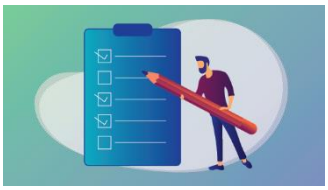
This AI course is designed to equip learners with:

- The foundational knowledge and skills required to harness the power of Generative AI.
- The ability to identify opportunities for innovation and implementation of AI within their organizations.
- The skills to drive organizations toward a future of enhanced creativity and competitive advantage using AI techniques.

GenAI (On your Day 32nd)

Continuous Learning: Technical Enablement

Knowledge check - Moodle



Activity Code: **ATHDW335105**

GENERATIVE AI QUICK ASSESSMENT FOR ELEARNING QUIZ [101-BASICS]

- This assessment is to assess the knowledge of associates on Generative AI tools and concepts at a Beginner proficiency.

Additional Learning: Technical Enablement

Try to complete the following additional Udemy courses (Optional) to learn more about GenAI and ChatGPT.

Courses	Duration (in hrs.)	What you'll learn
Generative AI for Beginners	3.5	✓ Detailed understanding of Generative AI ✓ Key concepts - LLM, Embeddings, Prompt Engineering, Fine Tuning ✓ Industry use cases and ideas that can be implemented ✓ Hands-on experience, creating a chatbot ✓ Future trends and how to stay relevant in post-GenAI world. ✓ Roadmap for continuous learning
Intro to ChatGPT and Generative AI	1.5	✓ How to prompt ChatGPT effectively ✓ How to skyrocket productivity using AI ✓ Understand Generative AI and the underlying technology ✓ Grasp the importance of AI ethics

Common for AWS and Azure DevOps – Specialized

Continuous Learning: Technical Enablement

Below are related Azure DevOps specialized udemy courses. You are recommended to complete all the below before you deep dive into lab sessions in the coming days.

- Building Cloud Infrastructure with Terraform
- Docker - Introducing Docker Essentials, Containers, and more
- Docker for the Absolute Beginner - Hands On - DevOps
- Docker Certified Associate 2023
- Learn DevOps: The Complete Kubernetes Course
- Certified Kubernetes Administrator (CKA) with Practice Tests
- SRE - The Big Picture
- SRE & AUTOMATION [101-BASICS]

The following topics will be handled by the trainer through Instructor led training

- Terraform Fundamentals (Instructor led training)
- Docker Fundamentals (Instructor led training)
- Kubernetes Fundamentals (Instructor led training)

Day 54 to 59

Cloud Lab (Day 54 to 59)

Continuous Learning: Cloud Hands-on

You will be working with BU SMEs to practice the Cloud hands-on in the CCL Lab. You will be provided CCL Lab access and demo from CCL Lab. Necessary Use Cases will be given by BU.

Day 60 to 61

Evaluation:
Interim Assessment + Technical Evaluation

Knowledge Based Assessment on Interim Assessment with passing score >=70%

Note: On your day 60, you will be taking up interim evaluation**.**

Schedule – Stage 2: DevOps Specialized Training

Day 62 to 66

DevOps Specialization skills - Azure DevOps(Day 62 to 66)

Continuous Learning: Technical Enablement

The following topics will be handled by the trainer through Instructor led training.

- Azure DevOps AZURE DEVOPS (VSTS) + AKS, Powershell (Instructor led training)

AZ-400 Designing and Implementing DevOps Certification

PowerShell - essential course with labs

Day 67 to 72

Cloud Lab (Day 67 to 72)

Continuous Learning: Cloud Hands-on

BU Driven Hands-on: You will be working with BU SMEs to do the hands-on. Necessary Use Cases will be given by BU and evaluated by them. Scores will be updated in the system.

Day 73 to 75

Evaluation:

Final Assessment + Technical Evaluation

Knowledge Based Assessment on Final Assessment with passing score >=70%

Final Use case Development by GenCs shared by BU SMEs. Final Technical Evaluation by SMEs + Communication Evaluation with passing score >=70%.

Below ITIL Concepts Has to be parallelly learnt by GenC with CNAIP Stage 2 Topics.

ITIL Introduction - INC, SR, CHNG modules, SNOW tool

Continuous Learning: Technical Enablement

- Introduction to Service Management with ITIL 4
  Refer all the section in this Udemy course and complete the corresponding learnings.
- Creating Measures and Metrics in ITSM
  Refer all the section in this Udemy course and complete the corresponding learnings.
- ITIL 4 Foundation Practice Certification Exams (6 Exams)
  Refer all the section in this Udemy course and complete the corresponding learnings.

ServiceNow ITSM Processes

Refer all the section in this Udemy course and complete the corresponding learnings.

ServiceNow IT Service Management (CIS - ITSM) Practice Tests

Refer all the section in this Udemy course and complete the corresponding learnings.

How to learn each day?

Each day has a set of learning objectives. These learning objectives can be met by going through the Udemy courses and by completing the hands-on exercises mentioned in the daily plan.

The below strategies will help you decide the learning approach.

Learning Strategy & Approach

Find below few imaginary profiles. For each of these profiles we have defined a recommended learning approach. This is not an exhaustive list. The approaches below might help invent a new way of learning.

Profile #1

Harry Reacher

Engineering Discipline: Electronics

Skills: Python, Ruby on Rails, nginx

Project: Mining Crime Data to get Route Cause Insights

Learning Approach to Programming Languages: I do not want to waste my time learning. I am more practice oriented. I want to work on the problem immediately

What will work for me?

- Directly complete hands on exercises
- Refer Internet or Udemy Courses
- If hands on are implemented early, clarify your friends questions and troubleshoot their issues

Profile #2

Olivia Richards

Engineering Discipline: Computer Science

Skills: Java, C, C++

Project: Library Management System

Learning Approach to Programming Languages: I have interest, but I don't know where to start.

What will work for me?

- Go through the recommended Udemy Course
- Try completing the hands on exercises
- Get your clarifications solved with help from Tech SME
- Get help from other learners in your batch whom had already completed

Profile #3

Greg Anderson

Engineering Discipline: Civil

Skills: C

Project: Fiber reinforced concrete

Learning Approach to Programming Languages: I am scared of programming languages. I haven't got my hands dirty with coding

What will work for me?

- Go through the recommended Udemy Course
- Implement the coding along with the author of the Udemy Course
- Try completing the hands on exercises
- Clarify queries with SME
- Troubleshoot programming issues with help from SME or learner from your classroom whom had already completed

FAQ

1. Who can participate in this program?

   Students who have enrolled for Full Internship Program (or) the Cognizant on-boarded GEN Cs can participate in this program.

2. Is there any pre-learning I should do?

   No. This program is open to all students from any academic discipline.

3. How will I know my RAG status?

   It will be shown to you in the GEN C learn Platform, in your Home Page.

4. Whom do I reach out in case of any queries?

Coach is your point of contact.