# unext

# DS/AI/ML

### **Our Competency Development Framework**

| Proficiency             | Blended Learning          | Assessment Types  | Assessment<br>Category               | Learning Outcomes   |  |
|-------------------------|---------------------------|---|--------------------------------------|---|--|
| LEVEL 1<br>Beginner     | 80% Self-Paced<br>20% ILT | ✓ MCQ   | Knowledge                            | <ul> <li>Knows all terms associated with the technology</li> <li>Understands importance of the technology across various industries</li> <li>Can solve simple problems – based on predefined rules</li> </ul>   |  |
| LEVEL 2<br>Intermediate | 50% Self-Paced<br>50% ILT | <ul> <li>✓ MCQ</li> <li>✓ Simple Case Studies</li> </ul>  | Knowledge +<br>Skill                 | <ul> <li>Can understand more complex situations that are not first of its kind</li> <li>Can apply the technology to these more complex situations successfully</li> <li>Is able to understand the contextual influence on the usage of the technology and vice versa</li> </ul> |  |
| LEVEL 3<br>Advanced     | 20% Self-Paced<br>80% ILT | <ul> <li>✓ MCQ</li> <li>✓ Medium Case Studies</li> <li>✓ Internal Journal<br/>Submission</li> </ul>                           | Knowledge + Skill<br>+ Demonstration | <ul> <li>Is able to review implementations of others</li> <li>Is able to apply the technology to situations of any complexity</li> <li>Proactively manages risks associated with usage of a technology based on experience and knowledge</li> </ul>                             |  |
| LEVEL 4<br>Expert       | 20% Self-Paced<br>80% ILT | <ul> <li>✓ MCQ</li> <li>✓ Complex Case Studies</li> <li>✓ SME Interview</li> <li>✓ External Journal<br/>Submission</li> </ul> | Knowledge + Skill<br>+ Demonstration | <ul> <li>Knows how to compare and contrast related technologies</li> <li>Can create solutions from scratch</li> <li>Is able to review implementations effectively</li> <li>Is able to perceive new use cases of technologies</li> </ul>   |  |

### **DS/AI/ML Competency Development Framework**

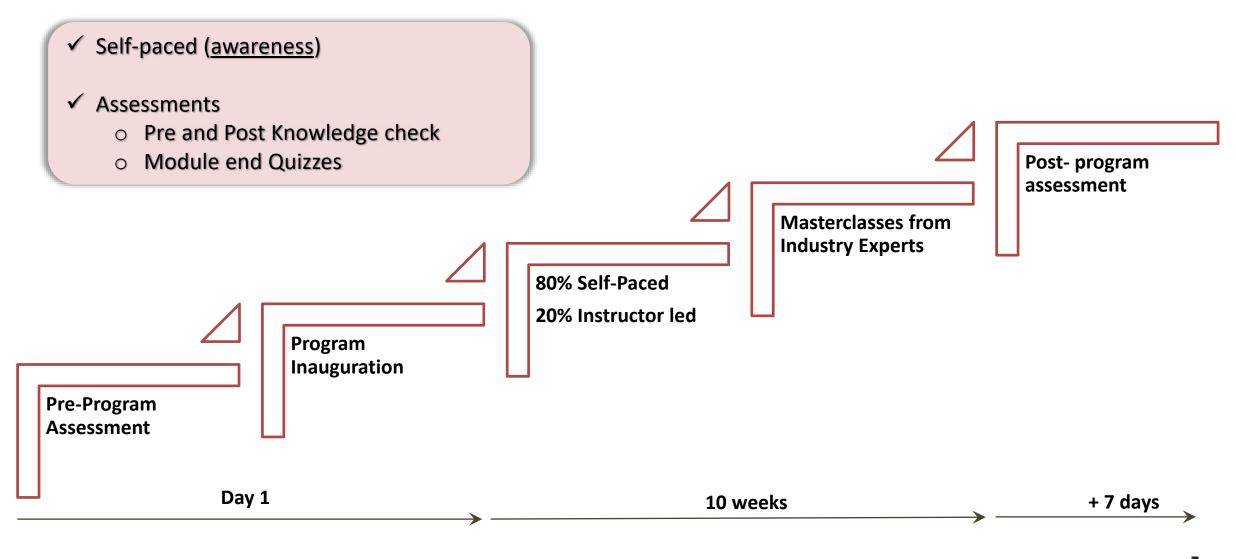
| Level   | Proficiency   | Self-Paced<br>hours | ILT<br>Hrs | Assessment<br>Type  | Total<br>duration<br>Hrs | Competency   | Pre-Requisite                              | Roles who can attend this training   |
|---------|---------------|---------------------|------------|---|--------------------------|--|--|--|
| Level 1 | Beginner      | 50                  | 10         | MCQ   | 60                       | <ul> <li>Programming and Statistics<br/>knowledge</li> </ul>   | Basics of<br>Programming                   | Common for all   |
| Level 2 | lintermediate | 30                  | 30         | MCQ + Simple<br>Case studies  | 60                       | <ul> <li>✓ Creating Data Visualizations.</li> <li>✓ Performing EDA.</li> <li>✓ Developing Machine Learning Models.</li> </ul>  | Completion of<br>Level 1 and<br>Assessment | Data Center Specialists, Infosecurity<br>Specialists, Developer, IT<br>Developers, Delivery Manager,<br>DevOps Manager, Application Owners(Enhancement<br>and New Implementations),<br>Application Security architects, Vertical Leads/<br>Managers, Cloud Migration Specialists (SaaS<br>/laaS),<br>Project Managers, Production Support<br>Engineers, Production Support Managers. |
| Level 3 | Advanced      | 20                  | 40         | MCQ+ Case<br>Study + SME<br>Interview                                     | 60                       | <ul> <li>Building, Evaluating and comparing<br/>Deep Learning models.</li> <li>Implementing Transfer Learning.</li> <li>Understanding Computer Vision<br/>and building Image classification<br/>Models.</li> </ul> | Completion of<br>Level 2 and<br>Assessment | Developer,IT Developers,<br>Delivery Manager,DevOps Manager,<br>Application Owners(Enhancement and New<br>Implementations), Application Security architects,<br>Vertical Leads/ Managers,<br>Cloud Migration Specialists (SaaS /IaaS),<br>Project Managers,Production Support<br>Engineers, Production Support Managers  |
| Level 4 | Expert        | 10                  | 32         | MCQ+ Case<br>Study + SME<br>Interview +<br>External Journal<br>submission | 42                       | <ul> <li>✓ Perform Text Analysis and implement<br/>NLP Algorithms.</li> <li>✓ Understand LLMs and build<br/>Generative AI models.</li> </ul>   | Completion of<br>Level 3 and<br>Assessment | Developer,IT Developers,<br>Delivery Manager,DevOps Manager,<br>Application Owners(Enhancement and New Implementations),<br>Application Security architects,<br>Vertical Leads/ Managers,<br>Cloud Migration Specialists (SaaS /IaaS),<br>Project Managers,Production Support<br>Engineers, Production Support Managers,   |
|         |               |                     |            |   | 222                      |  |  |  |



## Learning Path



### Learning Path – Level 1 (60 Hours)





### Learning Path – Level 1 (60 Hours)

| Pre-program |
|-------------|
| Assessment  |

- 25 Questions across domain and technology
- Baselining of current skills

# Self-paced (50 hours)

- 2 hrs per domain,8 hrs per tech
- Concept videos
- Reading Materials
- Interception points
- Module end quizzes

#### Webinars (8 hours)

- 1 to 2 hours per webinar
- Recap & Q&A
- Bringing the context( tech and domain)
- Connecting the dots
- Areas of implementation
- Engaging Activities ( Crossword and Jumble words)

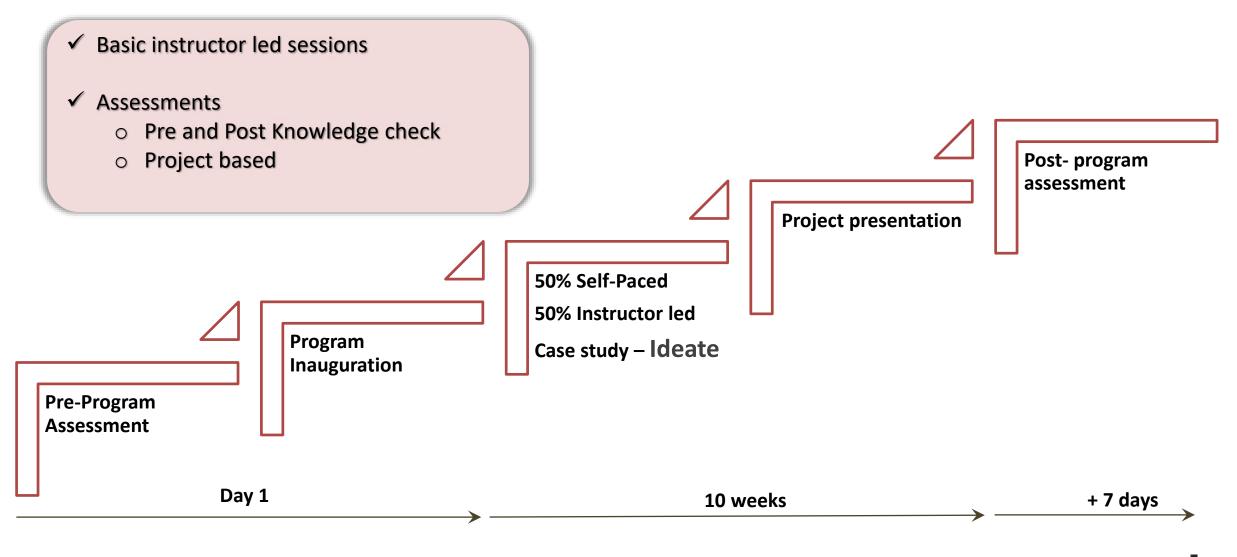
### Masterclass (2 hours)

- 1 each on domain and Tech
- Enable them to participate in tech forums

- Module end
- Knowledge check
- Post program
  - 2 sections summative of domain and tech



### Learning Path – Level 2 (60 Hours)





### Learning Path – Level 2 (60 Hours)

### Pre-program Assessment

- 25 Questions across domain and technology
- Baselining of current skills

### Self-paced(20 hours)

- E-learning
- Reference materials
- Playbooks

### ILT(30 hours)

- SME to cover each domain and tech along with case studies
- Case study
- At the end of module participants will be divided in to groups and will be given a problem statement
- The solutions will be presented in the next session followed by brainstorming

### Project(10 hours)

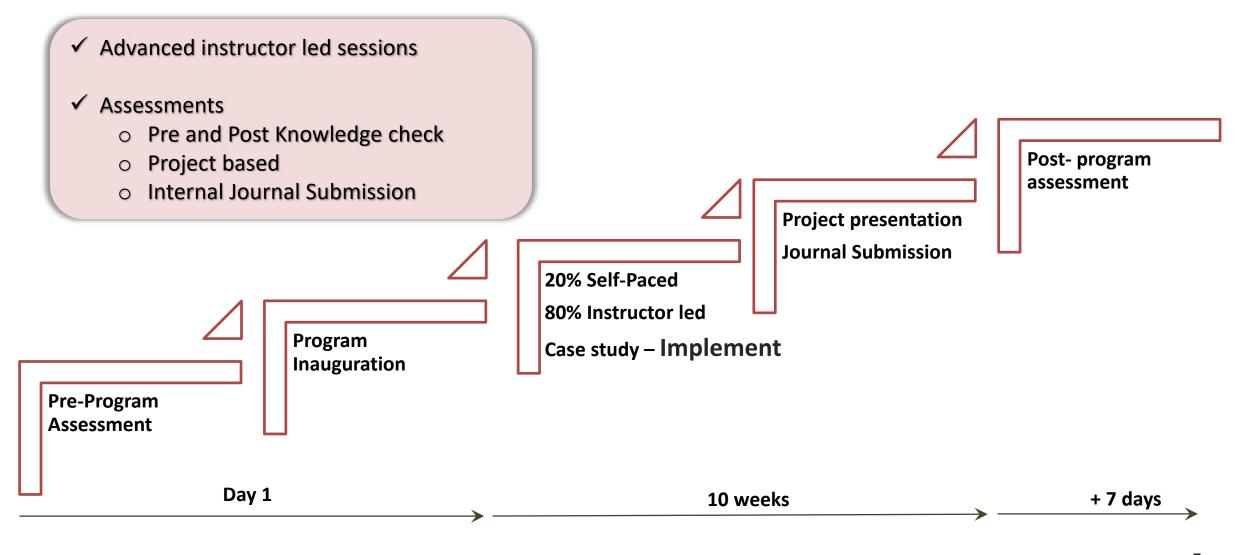
#### Project Execution

- Pre-program -Participants will be divided into groups and will be given a medium complexity problem statement
- During program Solving the problem using Whiteboarding
- Project Mentoring
- Post program Project presentation to a panel

- Module end
- Knowledge check
- Idea-a-thon
- Post program
  - 2 sections summative of domain and tech
  - Project Presentation



### Learning Path – Level 3 (60 Hours)





### Learning Path – Level 3 (60 Hours)

### Pre-program Assessment

- 25 Questions across domain and technology
- Baselining of current skills

### Self-paced(20 hours)

- E-learning
- Playbooks
- Advanced resources and references

### ILT(20 hours)

- SME to cover each domain and tech along with tailored case studies
- Case study
- At the end of module participants will be divided into groups and will be given a problem statement
- The solutions will be presented in the next session followed by brainstorming

#### Project(20 hours)

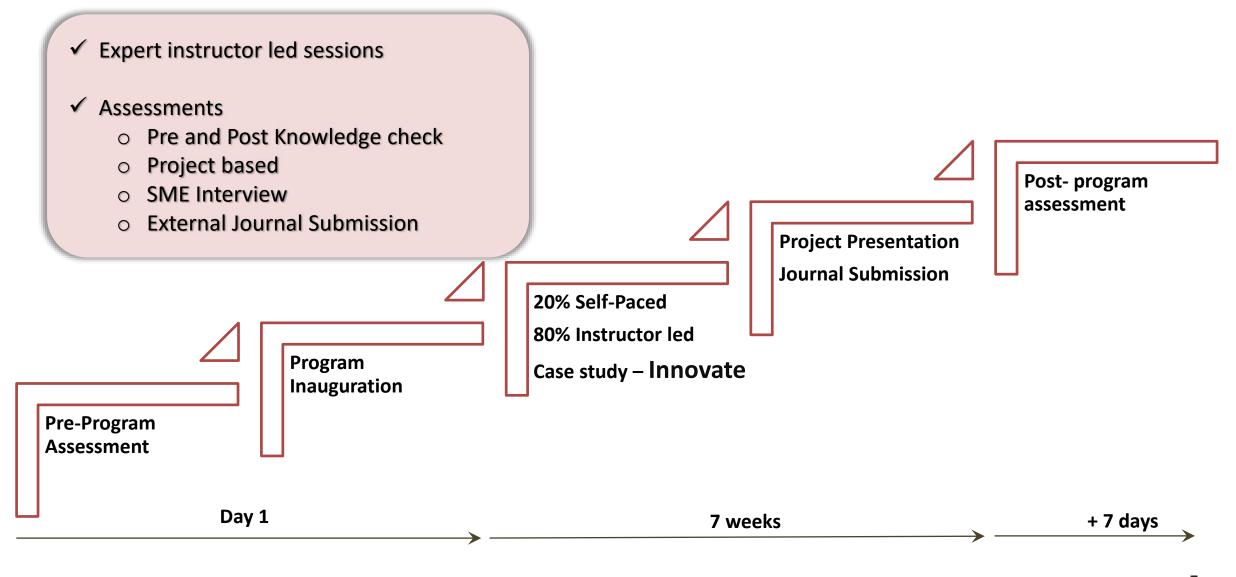
#### • Project Mentoring

- Project Execution
- Pre-program -Participants will be divided into groups and will be given a medium complexity problem statement
- During program Solving the problem by implementation
- Post program Project presentation to a panel

- Module end
- Knowledge check
- Code-a-thon
- Post program
  - 2 sections summative of domain and tech
  - Internal Journal Submission



### Learning Path – Level 4 (42 Hours)





### Learning Path – Level 4 (42 Hours)

#### Pre-program Assessment

- 25 Questions across domain and technology
- Baselining of current skills

## Self-paced(10 hours)

- Research & Exploration
- Playbooks
- Advanced resources
   and references
- Tech Forum Participation

### ILT(20 hours)

- SME to cover each domain and tech along with tailored case studies
- Case study
- At the end of module participants will be divided into groups and will be given a problem statement
- The solutions will be presented in the next session followed by brainstorming
- Masterclass on "Branding" (white papers, LinkedIn)

### Project(12 hours)

- Project Mentoring
- Project Execution
  - Pre-program -Participants will be divided into groups and will be given a medium complexity problem statement
  - During program Solving the problem by innovation
  - Post program Project Roadshow

- Module end
- Knowledge check
- Code-a-thon
- Post program
  - 2 sections summative of domain and tech
  - Project Roadshow
  - External Journal Submission







# **Thank You**