RIDE
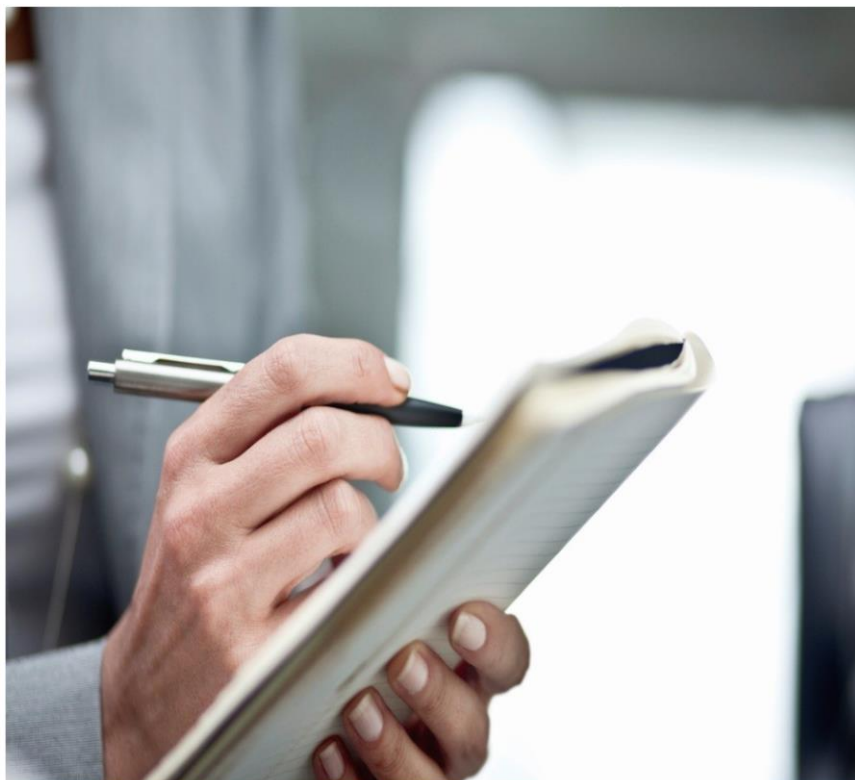# (FUTURE SKILLING INITIATIVE) PROGRAM

LEARNING GUIDE FOR ARTIFICIAL INTELLIGENCE COMPETENCY

Contents

1. About this Document

This is a detailed learning guide for the associates who have been selected to participate in the RIDE Wave 2 training program

2. Who should use this Document

The document is for internal use only. It should be used by associates undergoing training under the RIDE Program, training owners and faculty

3. Introductory Note

Welcome to the RIDE Programme!

Dear Colleagues,

To help us accelerate deployment and enhance the skills of associates on Future Skills, we have designed a high-quality skilling campaign called RIDE. The campaign started from the 17th of April, 2018. Each of the phases of the RIDE program is for a period of 6-8 weeks.

Under this initiative, associates have an opportunity to acquire future skills, practice them, get assessed and certified through an external platform. This will be followed by subsequent deployment in projects.

The RIDE, TLS, Competency, SBU, RMG teams will be working with you closely towards this competence building and deployment initiative over a period of 2 months.

Please remember that this is a program for YOU & it's our sincere request to you to give it your 100%.

Participation in the program is mandatory for every associate who has been selected for the program.

You will continuously receive communication from the Competency team, RIDE team and SBUs.

Best regards for RIDE.

Wish you a happy learning experience,

RIDE Team

4. Overall Program Details

- Each associate will be communicated the Wave 2 skill identified for him/her by the RIDE team

- The programs are offered in blended mode with focus on self -learning through MOOCs platforms and internal content supported with faculty connect sessions on WebEx

- Training owners have been assigned for every competency

- WebEx sessions by Faculty will be conducted on a weekly basis, on Tuesdays and Thursdays, from 3 pm to 4 pm (IST) and on Saturdays from 11 am to 12 pm (IST)

- Participants are expected to spend 12 hours every week to keep pace with the program including 5 hours of hands-on practice on Saturdays

- End course external certifications will be reimbursed for the associates as per the standard company external training and certification policy (refer BMS)

5. Step wise Program Plan

S.no	Key Step	Timeline
1	On being selected for RIDE, attend the opening connect sessions and clearly note the role you have been selected for	Week 1
2	Download the learning guide and go through it with specific emphasis on training owner, faculty, career path and learning path	Week 1
3	Identify the foundation skill for your role and complete the assessment. Contact your training owner for more details	Week 1
4	In case you are unable to complete the assessment, please use the learning links provided. Assessments must be completed within 7 days of the start date	Week 2
5	Register yourself on all the learning portals (using Tech M ID only) specified for your role as per the learning path. Registration guidelines for specific portals are given in the Learning Guide	Week 2
6	Undergo training in your own time as per the sequence provided in the learning path. 12 hours of work per week is expected of you. Keep your training owner informed about your progress	Week 2- Week 6
7	Attend connect sessions as per the schedule. Attendance is mandatory. Reach out to your training owners in case of any assistance. You can also use the CoP to do the same	Week 1- Week 7
8	Stay in touch with your training owner and attend quizzes, assignments and SME connect sessions scheduled for you. Attendance is mandatory for these sessions	Week 1- Week 7
9	You are strongly advised to utilize the training lab facilities for hands on practice on Saturdays. Contact your training owner for more details	Week 3- Week 8
10	RMG-RH will be connecting you to Wave 2 opportunities. Stay on the lookout for such opportunities. Updates will be provided to you regularly via connect sessions/ CoPs and through RMG	Week 7- Week 8
11	Get certified in the core skill for your role at the end of program. Refer to the certification and reimbursement policy available on BMS	Week 7- Week 8
12	Get Ready for Deployment in the Role	Week 8

6. Skill Identification and Participation

This learning guide consisting of internal content (including recorded sessions on MyTube), MOOCs reference, external content, MyBeatPlus Communities of Practice (COP) links, and information on Training Owners/Faculty has been prepared for RIDE participants as mentioned in the previous section.

The subsequent sections contain details related to the following Modules:

Skills/Roles:

Competency	Skill	Cluster	RSC	Basic Skill
AI	AZURE AI	Application Design on Platform	Azure AI Developer	.Net,Python
	KNIME AI	Application Design on Platform	KNIME AI Developer	Python

Competency	Skill	Cluster	Role	Basic/Other Skills Required	Internal Assessment	Internal Courses	EDX	Others
AI	AZURE AI	Application Design on Platform	Azure AI Developer	.Net, Python	Not available	Not Available	https://www.eDX.org/course/principles-machine-learning-microsoft-dat203-2x-3	https://www.coursera.org/learn/machine-learning
	Knime	Application Design on Platform	KNIME AI Developer	Python	Not available	Not Available		https://www.coursera.org/learn/machine-learning (Machine Learning by Stanford university)

7. Learning Facilitation

Below is the list of Training Owners/Faculty for the program

Competency	Skill	Training Owner	Faculty
AI	AZURE AI	Prakash Goteti	Sivaraj Ambat (Sivaraj.Ambat@TechMahindra.com>)
	KNIME AI	Prakash Goteti	Ramachandran Narayanan RN00422229@Techmahindra.com

Below is the list of TLS Learning Consultants for different Business Units:

SBU to be handled	LC Name	Email ID	Contact Details
SBU D-CROW	Amol Joshi	jamol@TechMahindra.com	9823852755
SBU DACME	Parag Pimputkar	paragpi@TechMahindra.com	9049800804
SBU D-ASV, VBU BFSI	Ritu Manuja	Manuja.Ritu@TechMahindra.com	9822119596
SBU D-BT	Sanjana Sane	sssanjana@TechMahindra.com	9820831824
SBU D-NS	Sandhya Bordia	bordias@TechMahindra.com	9820618170
CBU CES, CBU EOF, CBU P2P BE	Sindhu Rajendra	SR0041556@TechMahindra.com	9884863939
VBU HLS, SBU D-APJ	Bhargav G	GB00361810@TechMahindra.com	9652191999
SBU D-IND, SBU D-SAEV	Dhanalaxmi Arla	Dhanalaxmi.Arla@TechMahindra.com	9866755338
CBU IMS, SBU D-IES, VBU IOT	Leelavani Sastry	Leelavani.Sastry@TechMahindra.com	9845455733
CBU P&PENG, SBU D-WC	Nagaraj Vaidya	nagarajv@TechMahindra.com	9980790460
SBU D-EMEA	Sandhya Bordia	bordias@TechMahindra.com	9820618170
CBU ESRM, CBU PACES, CIO, SBU_TIM, M_CTO, QWAY	Parkha Kaul	pk0031953@TechMahindra.com	8860491919

8. Communities of Practice and Practice Environments:

Internal Communities of Practice:

S.no	COP URL	Name of Owner
1	AI_RIDE_WAVEII	Prakash Goteti

External Communities of Practice:

S.no	COP URL	Name of Owner

The associates may sign up for any of the forums mentioned below for free and practice their programming skills

- https://www.hackerrank.com
- https://jsfiddle.net/
- https://coderbyte.com
- http://dabblet.com

The associates may sign up for any of the forums mentioned below to meet a community of programmers and coders, discuss coding challenges and problems, and learn new technologies

- Github (https://github.com/)
- Stack overflow (https://stackoverflow.com /)
- W3 Schools (https://www.w3schools.c om/)
- Bit Bucket (https://bitbucket.org/)
- Source Forge (https://sourceforge.net/)
- Experts Exchange(https://www.ex perts-exchange.com/)
- Dev.To (https://dev.to/)

Below is the list of Skill wise practice platforms and Case Study Assignments for practice:

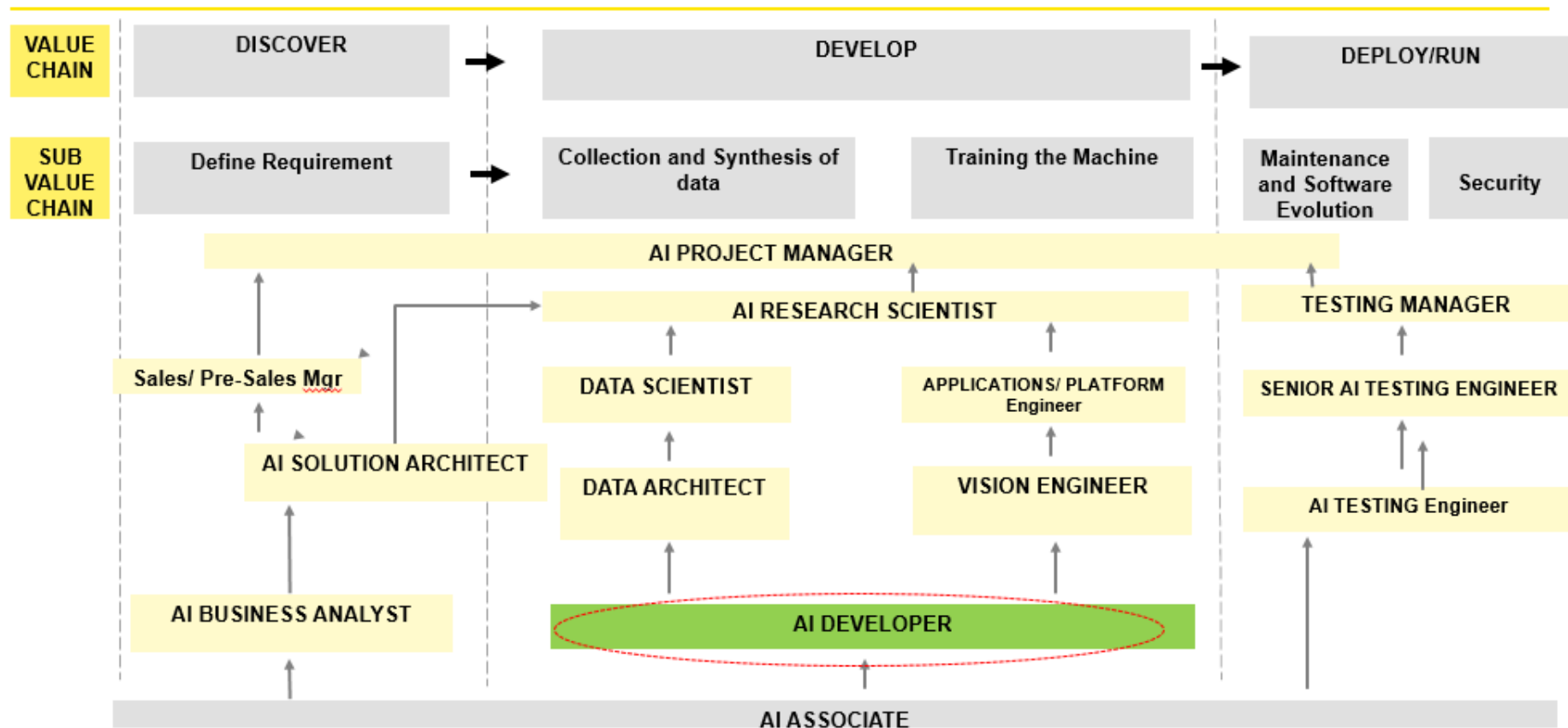| Competency	Skill	Role	Practice Platform	Case Study/Assignments
AI	Azure AI	Azure AI Developer	https://azure.microsoft.com/en-in/offers/ms-azr-0044p/	AI Case Study_Assignments
	Knime AI	KNIME AI Developer	1. How to install video: https://www.youtube.com/watch?v=yeHblDxakLk Installing on 64 bit machine -download link 2. https://www.knime.com/download-installer/2/64bit	AI Case Study_Assignments

9. Internal Assessments & External certifications

The assessment/ assessments platform to be used for this program have been listed below and have also been mentioned in Section 6.

Role	Cluster	Foundation Skill	Foundation Skill Assessment Link
AI Developer (with Azure, with IBM Watson or with Knime)	Basic Programming Language	Python	LP01446 Python L1

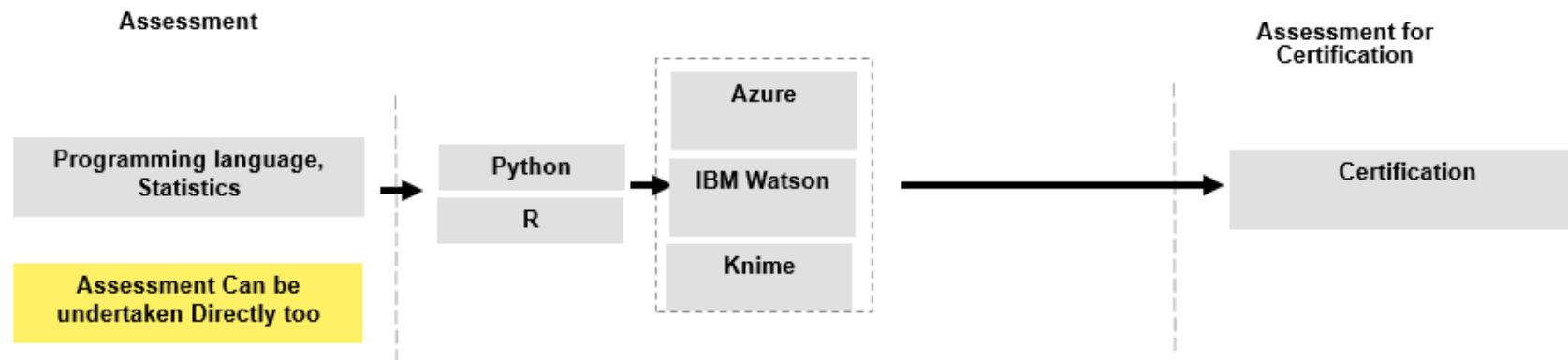| Competency	Skill	Cluster	RSC	Internal Assessment	External Assessment /Certification
AI	AZURE AI	Application Design on Platform	Azure AI Developer	Not Available	99 USD+ 3174 INR for ML coursera course by Stanford University
	KNIME AI	Application Design on Platform	KNIME AI Developer	Not Available	3174 INR for ML coursera course by Stanford University(Pre-requisite)

10. Career Paths and Learning Journey

AI Value Chain, Roles and Career Paths

AI Developer RSC Under AI Competency
With Learning Journey

Competency	Cluster	Skill	Remarks
4. Artificial Intelligence	Programming Language	Python or R	AI Developer with Azure (4.1.1)
			AI Developer with IBM Watson (4.1.2)
	Application Design on Platform	Azure, IBM Watson, Knime	AI Developer with Knime (4.1.3)

Assessment

Assessment for Certification

Programming language, Statistics → Python / R → Azure / IBM Watson / Knime → Certification

Assessment Can be undertaken Directly too

11. Participant Interaction Plan

- SME Connect Sessions will start from the 24th April 2018
- Every Tuesday and Thursday from 3:00 PM to 4 PM (IST), SME and Faculty Connect Sessions will be held to discuss progress, queries, case studies, and latest market trends
- Every Saturday Faculty connect sessions will be held between 11:00 AM to 12:00 PM (IST) to resolve the issues, discuss Q&A and way further. Faculty will resolve further queries during the hands-on practice, if any on the community foru

11. Participant Interaction Plan

12. Learning Tracker

The associates may use this template to record their learning progress log/activities.

AI Developer Azure: Learning Plan				Effort in hrs	
Mileston e#	Due-Date	Description	Modules/Topics	Preparatio n time	Practic e time
		Week1	Introduction (End of topic quiz) Linear regression with one variable (end of topic quiz) Linear algebra overview	10	0
1	18-May-18	Python L1 Quest assessment: LP01446 Python L1 Course progress -5%			
		Week2	Linear Regression with multiple variables (End of topic Quiz) Octave/Matlab tutorial(End of topic Quiz)	8	4
		Week3	Logistic Regression (End of Topic Quiz) Regularization (End of topic Quiz); Coding assignment	6	6
2	30-May-18	ML -2 Quest assessment Course progress -20%			
		Week4	Neural Networks - Representation (End of Topic Quiz) Coding assignment - multi class classification and neural networks	5	5
		Week5	Neural Networks - Learning Quiz+ Coding assignment	5	5
		Week6	Advice for applying ML Quiz+coding assignment Machine learning	6	6

			System design Quiz+coding assignment		
		Week7	SVM Quiz +coding assignment	5	5
3	27-Jun-18	Mile stone 3: ML -3 Quest assessment Course progress -40%			
		Week8	Un-supervised Learning (Quiz) Dimensionality Reduction (Quiz +Coding assignment on PCA)	5	5
		Week9	Anomoly detection (Quiz) Recommendation systems (Quiz+ coding assignment on both concepts)	6	6
		Week10	Large Scale ML Quiz	4	2
		Week11	Application Example: Photo OCR Quiz	4	2
4	25-Jul-18	Mile stone 4: ML -4 Quest assessment Course progress -60%			
		Week12	Explore classification	5	5
		Week13	Regression in machine learning	5	5
		Week14	How to improve supervised models	5	5
5	15-Aug-18	AI Azure Quest assessment Course progress -80%			
		Week15	Details on non-linear modeling	5	5
		Week16	Clustering	5	5
		Week17	Recommender systems	5	5
6	6-Sep-18	AI Azure Quest assessment Course progress -100%			
	10-Sep-18	External certification	Coursera machine learning + eDX Azure ML		

AI Developer KNIME: Learning Plan				Effort in hrs	
Milestone #	Due-Date	Description	Modules/Topics	Preparation time	Practice time
		Week1	Introduction (End of topic quiz) Linear regression with one variable (end of topic quiz) Linear algebra overview	10	0
1	18-May-18	Python L1 Quest assessment: LP01446 Python L1 Course progress -5%			
		Week2	Linear Regression with multiple variables (End of topic Quiz) Octave/Matlab tutorial(End of topic Quiz)	8	4
		Week3	Logistic Regression (End of Topic Quiz) Regularization (End of topic Quiz); Coding assignment	6	6
2	30-May-18	ML -2 Quest assessment Course progress -20%			
		Week4	Neural Networks -Representation (End of Topic Quiz) Coding assignment - multi class classification and neural networks	5	5
		Week5	Neural Networks -Learning Quiz+ Coding assignment	5	5

		Week6	Advice for applying ML Quiz+coding assignment Machine learning System design Quiz+coding assignment	6	6
		Week7	SVM Quiz +coding assignment	5	5
3	**27-Jun-18**	**Mile stone 3: ML -3 Quest assessment Course progress -40%**		
		Week8	Un-supervised Learning (Quiz) Dimensionality Reduction (Quiz +Coding assignment on PCA)	5	5
		Week9	Anomoly detection (Quiz) Recommendatio n systems (Quiz+ coding assignment on both concepts)	6	6
		Week10	Large Scale ML Quiz	4	2
		Week11	Application Example: Photo OCR Quiz	4	2
4	**25-Jul-18**	**Mile stone 4: ML -4 Quest assessment Course progress -80%**		
		Week12	Contact Session 1 on KNIME Contact Session 2 on KNIME	5	5
5	**7-Aug-18**	**KNIME Quest assessment Course progress -100%**		
	10-Aug-18	**External certification**	**Coursera machine learning**		

13. FAQs

1. What is the objective of the RIDE program?

Answer: The objective of RIDE program is to equip associates with necessary skills needed for role-readiness of Wave 2 competencies for future. The program aims to provide learning, certification, and deployment opportunities for associates in future technologies in the organization

2. What is the duration of the RIDE program?

Answer: Two Months from the start date

3. Who all are eligible for the program?

Answer: Participation in this program is by invitation only. All the associates selected for this program need to be mandatorily part of the program

4. How has a skill been identified for associates?

Answer: Skills have been identified based on the requirements in various competencies within the organization and the current skill set possessed by the associate

5. Is participation in the program optional?

Answer: **Participation in the program is mandatory**. Any exemption requires SBU Head approval on mail along with reasons for the same communicated to Training Owner/ SBU Learning Consultant

6. How will one be deployed after undergoing training in the program?

Answer: During deployment, preference will first be given in the same SBU.

7. How will training be offered during the course of this program?

Answer: Programs will be offered in blended mode with focus on self -learning through MOOCS, supported with weekday and weekend faculty connect sessions through WebEx and communities of practice (COP). Participant are expected to leverage Saturday for practice sessions (at least 5 hours)

8. Where can associates find more information about RIDE?

Answer: The associates can get in touch with their respective Training Owner or Learning Consultant in case any other information regarding RIDE program is required

14. Glossary

S.no	Term	Description
1	RIDE	Future Skilling Initiative With Digital Enhancement
2	TLS	Technical Learning Services
3	SBU	Strategic Business Unit
4	MOOC	Massive Open Online Course
5	COP	Communities of Practice
6	SPOC	Single point of contact
7	F2F	Face to Face

15. Annexures

Below are the guidelines for logging into and registering on eDX and PluralSight:

EDX:

- Register for an eDX account and undergo the course
- Apply for certification discount coupon to TLS
- Book the exam and appear online
- Apply for reimbursement (if applicable)

Few important links for eDX:

S.no	Topic	Link
1	Training & Certification policy for eDX courses	EASY >> Qway >> BMS >> Support Function Process >> Associate Support >> TLS >> General >> Training Certification Reimbursement Policy (PLEASE REFER SECTION-6)
2	List of Available programs with discounted certification price	https://mink.techmahindra.com/kms/esgt/Documents/eDX/EDX courses for TechM.xlsx
3	Discount coupon requisition form	https://mink.techmahindra.com/kms/esgt/Documents/eDX/eDX Certification Request Form.xlsx
4	Email Id for TechM eDX support	TLS.eDXsupport@techmahindra.com
5	Link to eDX FAQ	https://mink.techmahindra.com/kms/esgt/Documents/eDX/FAQ - eDX Training and Certification.pdf

Pluralsight:

- To register on PluralSight, an email needs to be sent to Neelima Jadhav at neelimaj@techmahindra.com
- Neelima will send one request form to be filled by the associate mentioning the BUSINESS BENEFIT of using PluralSight which would require Manager's approval
- Each associate is required to fill the requisition form and send it back to Neelima. Upon confirmation of validity of the contents in the form, the associate will be sent one link for "UNDERTAKING" which would precisely mention the DOs and DON'Ts for accessing PluralSight. The associate would be required to accept the undertaking
- Once the undertaking has been accepted, registration for the associate would stand complete and an invite mail would be sent out. Each associate would need to accept the invite and login to PluralSight with TechM ID

END OF DOCUMENT

RIDE Learning Guide