



Deputy of training Plan and curriculums office

# Competency Training standard

# Title

# Applying Activity-Based Intelligence (ABI) Methods

# **Occupational group**

Information Technology

International code

2529-53-105-1

Date of standard compilation: 2015/10/15

Control of board on content compilation and accreditation: Plan and curriculums office National code: **2529-53-105-1** 

Member of Specialized commission IT Curriculum development:

-Ali Mosavi: Director Manager of Iran TVTO Curriculum Development Office

-Hassan Solimany: Member of Iran TVTO IT Curriculum Development -Sarang Ghorbanian: Member of Iran TVTO IT Curriculum Development

- -Dariush Esmaeili: Member of Iran TVTO IT Curriculum Development
- -Bita Rahnamaie Zarbijari: Member of Iran TVTO IT Curriculum Development
- -Ehsan Pouri: Member of Iran TVTO IT Curriculum Development

-Shahram Shokofian: Manager of Iran TVTO IT Curriculum Development

**Cooperator Specialized organizations for compiling the training standard :** 

**Revision Process:** 

- Scientific content
- According to market
- Equipment
- Tools

Plan & Curriculum Office 97, nosrat avenue – Tehran, Iran

Tel:+98-21-66569900-9 Fax: +98-21-66944117 E-mail:Barnamehdarci@yahoo.com

	Training Standard Writers							
	Name & family name	Academic document	field	Job & post	Relevant experiences	ADD		
1	Shahram Shokofian	M.Sc.	Software Engineering	Curriculum Development Expert	Technical and Vocational Training Organization	IRAN TVTO		
2	Ehsan Pouri	Phd	Media Management	Curriculum Development Expert	Technical and Vocational Training Organization	IRAN TVTO		
3	Sarang Ghorbanian	Phd	IT	Curriculum Development Expert	Technical and Vocational Training Organization	IRAN TVTO		
4	Dariush Esmaeili	Phd	IT	Curriculum Development Expert	Technical and Vocational Training Organization	IRAN TVTO		

#### **Definitions**:

#### Job standard:

The characteristics ' required competencies and abilities for Efficient Performance in work environment is called "the Job standard", and sometimes "The Occupational standard"

#### **Training standard:**

The Training Map for achieving the Job's subset Competencies.

#### Job title:

Is a set of Tasks and Abilities which is expected from an employed person in the defined level

#### Job description:

A statement covering the most important elements of a job, namely the position or title of the job, the duties, job's relation with other jobs in a occupational field, the responsibilities, workplace conditions and required performance standards.

#### **Course duration**:

The minimum of time which is required to achieve the training objects.

#### Admission requirements:

The minimum of competencies and abilities which are obligatory for a potential admission.

#### **Evaluation:**

The process of collecting evidence and judgment about wetter a competency is achieved or not. Include: written examination, practical examination

Required Qualifications for Trainers:

The minimum of Trainer's technical and vocational abilities which the trainer is required to have. **Competency:** 

The ability of efficient performing a duty in a variety of workplaces conditions

Knowledge:

The minimum set of facts and mental capacities which is necessary for achieving a competency. This can include science, (Mathematics, physics, chemistry or biology), technology or technical. **Skill:** 

The minimum coordination between mind and body for achieving an ability or competency. It normally applied to practical skills.

#### Attitude:

A set of emotional behaviors required for achieving a competency and can have non-technical skills and occupational ethics.

#### Safety:

The cases which doing or not doing something can cause harm or accident

#### **Environmental Consideration:**

A set of consideration about the act which should be done to minimize the environmental damage or pollution.

#### **Competency Title:**

### **Applying Activity-Based Intelligence (ABI) Methods**

#### **Competency Description**:

In this course, you gain the foundational knowledge for integrating ABI methods and concepts into your analytic practice. You identify and develop low-signature targets and activities of interest by applying the "Four Pillars" of ABI. Additionally, you expand your analytic capabilities beyond traditional All-Source methods, integrating them with best practices for big data analytics.

- Expand your analytic capabilities
- Prepare your data to overcome challenges, resource limitations and address new questions at the speed of mission
- Uncover Patterns of Life (PoL) using ABI techniques
- Apply the Four Pillars of ABI

#### **Admission Requirements:**

minimum degree of education: Computer or IT related Bachelor

minimum physical and mental ability:-

prerequisite skills:-

#### **Course duration:**

Course duration : 50 hours

-theoretical: 15 hours

-practical: 35 hours

-apprenticeship:... hours

-project:... hours

#### **Course Evaluation :(%)**

Written:25%

Practical:65%

Work ethics:10%

#### **IRANTVTO Evaluation :(%)**

Written Examination:25% Practical Examination:65% Ethics:10%

Computer or IT related Bachelor with 2 years experience

# Competency training standard

# Tasks

``	Title
1	Key Factors Impacting the Practice of Intelligence
2	Intelligence analysis: A special type of work
3	Thinking About Thinking Analysis as forecasting and modeling
4	Forecasting and cognitive style
5	ABI as an Analytic Methodology A strategy for addressing concurrent analytic
	challenges
6	Why activity is important
7	Thinking About Data Characterizing data types
8	Activity-based perspective on data
9	Optimizing resource allocation
10	Preparing Your Data Georeference to discover
11	Integrate before exploit
12	Discovering Correlations through Spatiotemporal Analysis Sequence Neutrality
13	Data Neutrality
14	Developing Hypotheses and Assessments Modeling Behavior
15	Reasoning styles
16	Production and Briefing Developing ABI Products
17	Delivering ABI results to stakeholders

Training standard				
Contents analysis form				
Title:	time			
Key Factors Impacting the Practice	theoretical	practical		
of Intelligence	Determined	by the ins		
Knowledge ,skill ,attitude ,safety, Env	vironmental C	Consideratio	on	Equipments ,tools, materials ,books
Knowledge and Skill:	Determined	l by the ins	tructor	According to the
• Technology				trainer
• Methodology				-
• Data				
Mission				
• Culture				-
Cognition				
Attitude:	L.	1	1	
Speed and accuracy in doing the right	thing			
Health & Safety:				-
Compliance with safety protection in	the workplace	e		
				_
Environmental Consideration:				
Compliance with environmental prote	ction			

Training standard				
Contents analysis form				
Title:	time			
Intelligence analysis: A special type	theoretical	practical		
of work	Determined	by the ins	tructor	
Knowledge ,skill ,attitude ,safety, Env	Equipments ,tools, materials ,books			
Knowledge and Skill:	Determined	by the inst	tructor	According to the
• Thinking, writing, speaking and imagining				trainer
<ul> <li>Our brains as our most</li> </ul>				
valuable tool				
Attitude:				-
	thing			
Speed and accuracy in doing the right	uning			
	-			
Health & Safety:				
Compliance with safety protection in t	the workplace	e		
				-
Environmental Consideration:				
Compliance with environmental prote	ction			

Contents analysis form Title:	41.000			
Thinking About Thinking	time theoretical	practical	total	
Analysis as forecasting and modeling	Determined	by the inst	tructor	
Knowledge ,skill ,attitude ,safety, E	nvironmental C	consideratio	on	Equipments ,tools, materials ,books
Knowledge and Skill:	Determined	by the inst	tructor	According to the
• Achieving excellence in forecasting				trainer
• Modeling Pattern of Life				_
<ul><li>(PoL)</li><li>ABI as judgemental</li></ul>				
bootstrapping				
Attitude: Speed and accuracy in doing the rig	ht thing			
Health & Safety:				
Compliance with safety protection i				
Environmental Consideration:				
Environmental Consideration.				

Training standard						
Contents analysis form Title:	time					
Forecasting and cognitive style	theoretical	practical				
	Determined	-	tructor			
Knowledge ,skill ,attitude ,safety, Env		•		Equipments ,tools, materials ,books		
Knowledge and Skill:	Determined	by the inst	tructor	According to the		
Cognitive style assessment				trainer		
• Cognitive style and Subject				-		
Matter Expertise				_		
				-		
Attitude:	-					
Speed and accuracy in doing the right						
Health & Safety:						
Compliance with safety protection in	Compliance with safety protection in the workplace					
Environmental Consideration:						
Compliance with environmental prote	ction					

Training standard				
Contents analysis form				
Title:	time			
ABI as an Analytic Methodology	theoretical	practical	total	
A strategy for addressing concurrent	Determined	-	tructor	
analytic challenges	Determined	i by the ms	uuctoi	
Knowledge ,skill ,attitude ,safety, Env	Equipments ,tools, materials ,books			
Knowledge and Skill:	Determined	by the inst	tructor	According to the
• Overcoming data sparseness				trainer
• Lack of signature				
• Volume				
• Resolution				
Confidence				
Attitude:				
Speed and accuracy in doing the right	thing			
Health & Safety:				
Compliance with safety protection in t	the workplace	e		
Environmental Consideration:				
Compliance with environmental prote	ction			

Contents analysis form				
Title:	time			
Why activity is important	theoretical	practical	total	
	Determined	by the inst	tructor	
Knowledge ,skill ,attitude ,safety, En	vironmental C	consideratio	on	Equipments ,tools, materials ,books
Knowledge and Skill:	Determined	by the inst	tructor	According to the
Tuning for richness and volume				trainer
• Creating an avenue for data discovery				
<ul> <li>Uncovering "unknown- unknowns"</li> </ul>				
Attitude:				
Speed and accuracy in doing the right	t thing			
Health & Safety:				
Health & Safety: Compliance with safety protection in	the workplace	2		
•	the workplace	2		

total cructor on cructor	Equipments ,tools, materials ,books According to the trainer				
on	materials ,books According to the				
	materials ,books According to the				
tructor					
	trainer				
	_				
Attitude:					
Speed and accuracy in doing the right thing					

Title:	time				
Activity-based perspective on data	theoretical	practical	total		
	Determined	by the ins	tructor		
Knowledge ,skill ,attitude ,safety, Env	ironmental C	onsideratio	on	Equipments ,tools, materials ,books	
Knowledge and Skill:	Determined by the instructor			According to the	
• Understanding the source vs.				trainer	
extracting the insight				-	
• The power of metadata				-	
• Analyzing data vs.				_	
information vs. knowledge					
Attitude:				-	
Speed and accuracy in doing the right					
Health & Safety:					
Compliance with safety protection in t					
Environmental Consideration:					
Compliance with environmental protect	ction				

Title:	time				
Optimizing resource allocation	theoretical	practical	total		
	Determined	by the inst	tructor		
Knowledge ,skill ,attitude ,safety, Env	Equipments ,tools, materials ,books				
Knowledge and Skill:	Determined	by the inst	tructor	According to the	
• Focusing data acquisition				trainer	
<ul><li>resources on activity</li><li>Forecasting as an enabler of</li></ul>					
resource allocation				-	
• Knowing when and where to					
look for activity					
				_	
Attitude:					
Speed and accuracy in doing the right					
Health & Safety:				-	
Compliance with safety protection in t	he workplace	e			
	compliance with safety protection in the workplace				
Environmental Consideration:					
Compliance with environmental protect	ction				

Title:	time				
Preparing Your Data	theoretical practical total			-	
Georeference to discover	Determined	•			
Knowledge ,skill ,attitude ,safety, Env	ironmental C	onsideratio	on	Equipments ,tools, materials ,books	
Knowledge and Skill:	Determined by the instructor			According to the	
• Identifying spatial cues in				trainer	
diverse data streams				-	
• Applying tools to extract				-	
spatial features					
Attitude:	<u> </u>			-	
Speed and accuracy in doing the right	thing				
Health & Safety:				-	
Compliance with safety protection in t	he workplace	e			
Environmental Consideration:					
Compliance with environmental protection	ction				

Title:	time			
Integrate before exploit	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Env	Equipments ,tools, materials ,books			
Knowledge and Skill:	Determined	by the ins	tructor	According to the
• Categorizing data by activity				trainer
type				-
Unlocking connections				-
across data types through				-
multi-layered preprocessing				
• Optimizing exploitation				
Attitude:				-
Speed and accuracy in doing the right				
Health & Safety:				
Compliance with safety protection in t				
Environmental Consideration:				
Compliance with environmental protect				

Title:	time			
Discovering Correlations through	theoretical	practical	total	-
Spatiotemporal Analysis	Determined	-		
Sequence Neutrality	Determinet	i by the ms	uctor	
Knowledge, skill, attitude, safety, Env	Equipments ,tools, materials ,books			
Knowledge and Skill:	Determined	l by the ins	According to the	
• Enabling visual data				trainer
discovery				_
• Applying constraints and				-
filters				
• Assembling context around				
the subject				
				_
Attitude:				
Speed and accuracy in doing the right				
Health & Safety:	-			
Compliance with safety protection in				
Environmental Consideration:				
Compliance with environmental protection				
i i i i i i i i i i i i i i i i i i i				

Title:	time			
Data Neutrality	theoretical	practical	total	
	Determined	by the ins	tructor	
Knowledge ,skill ,attitude ,safety, Env	Equipments ,tools, materials ,books			
Knowledge and Skill:	Determined	by the ins	tructor	According to the
• Using locations to uncover				trainer
context				
• Linking data through activity				-
• "Who-where-who?" /				
"Where-who-where?"				
				-
Attitude:				
Speed and accuracy in doing the right				
Health & Safety:				
Compliance with safety protection in t				
Environmental Consideration:				
Compliance with environmental protection				

Title:	time						
Developing Hypotheses and	theoretical	practical	total				
Assessments		-					
Modeling Behavior	Determined	i by the ms	tructor				
Knowledge ,skill ,attitude ,safety, En	1, attitude, safety, Environmental Consideration						
Knowledge and Skill:	Determined	l by the ins	According to the				
• What are models?				trainer			
• Forming your hypothesis				-			
• Testing your hypothesis							
Attitude:				-			
Speed and accuracy in doing the righ	t thing						
speed and accuracy in doing the right							
	-						
Health & Safety:							
Compliance with safety protection in							
Environmental Consideration:							
Compliance with environmental protection							
-							

Title:	time			
Reasoning styles	theoretical	practical	total	
	Determined	by the ins	tructor	
Knowledge, skill, attitude, safety, Env	Equipments ,tools, materials ,books			
Knowledge and Skill:	Determined	by the inst	tructor	According to the
• Deductive				trainer
• Inductive				-
• Abductive				-
Attitude:				
Speed and accuracy in doing the right				
Health & Safety:				
Compliance with safety protection in t				
Environmental Consideration:	-			
Compliance with environmental protect				

Title: time				
Production and Briefing	theoretical	practical	total	
Developing ABI Products	Determined	by the ins		
Knowledge ,skill ,attitude ,safety, Env	Equipments ,tools, materials ,books			
Knowledge and Skill:	Determined	by the inst	tructor	According to the
Depicting PoL				trainer
• Conveying activities of				-
human networks with clarity				-
• Communicating in static vs.				
dynamic formats				
Attitude: Speed and accuracy in doing the right				
Health & Safety:		-		
Compliance with safety protection in t				
Environmental Consideration:				
Compliance with environmental protection				

Title:	time				
Delivering ABI results to	theoretical	practical	total	-	
stakeholders	Determined by the instructor				
Knowledge ,skill ,attitude ,safety, Env	owledge ,skill ,attitude ,safety, Environmental Consideration				
Knowledge and Skill:	Determined	by the inst	tructor	According to the	
• The art of storytelling				trainer	
Communicating to decision					
makers				-	
				-	
				-	
Attitude:					
Speed and accuracy in doing the right					
Health & Safety:	-				
Compliance with safety protection in t					
Environmental Consideration:					
Compliance with environmental protection					