



*Ministry of cooperatives  
Labour and Social Welfare*



*Iran Technical and Vocational  
Training Organization*

Deputy of training  
Plan and curriculums office

# Competency Training standard

## Title

# Activity-Based Intelligence (ABI) Programming in the Field

## Occupational group

Information Technology

International code

**2529-53-104-1**

**Date of standard compilation: 2015/10/15**

Control of board on content compilation and accreditation: Plan and curriculums office  
National code: **2529-53-104-1**

**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**

	<b>Name &amp; family name</b>	<b>Academic document</b>	<b>field</b>	<b>Job &amp; post</b>	<b>Relevant experiences</b>	<b>ADD</b>
1	<b>Shahram Shokofian</b>	M.Sc.	Software Engineering	Curriculum Development Expert	Technical and Vocational Training Organization	IRAN TVTO
2	<b>Ehsan Pouri</b>	Phd	Media Management	Curriculum Development Expert	Technical and Vocational Training Organization	IRAN TVTO
3	<b>Sarang Ghorbanian</b>	Phd	IT	Curriculum Development Expert	Technical and Vocational Training Organization	IRAN TVTO
4	<b>Dariush Esmacili</b>	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 whether 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.

<b>Competency Title:</b>
<b>Activity-Based Intelligence (ABI) Programming in the Field</b>
<b>Competency Description:</b>
<p>This course is an immersive scenario-based training event, designed to test your tenacity as a full-stack ABI developer. This advanced programming class teaches lean development techniques using XP (Extreme Programming) concepts. In this course, you hone your programming and customer engagement skills to rapidly develop target-based analytics in a realistic, operational environment.</p> <ul style="list-style-type: none"> <li>• Efficiently build high-impact applications alongside analysts</li> <li>• Decompose ABI analyst workflow into technical requirements</li> <li>• Refine and improve ABI applications as mission evolves</li> <li>• Navigate IT and security constrained technical environments</li> </ul>
<b>Admission Requirements:</b>
<p>minimum degree of education: Computer or IT related Bachelor  minimum physical and mental ability:-  prerequisite skills:-</p>
<b>Course duration:</b>
<p><i>Course duration : 50 hours</i>  <i>-theoretical: 15 hours</i>  <i>-practical: 35 hours</i>  <i>-apprenticeship:... hours</i>  <i>-project:... hours</i></p>
<b>Course Evaluation :(%)</b>
<p><b>Written:25%</b>  <b>Practical:65%</b>  <b>Work ethics:10%</b></p>
<b>IRANTVTO Evaluation :(%)</b>
<p>Written Examination:25%  Practical Examination:65%  Ethics:10%</p>
Computer or IT related Bachelor with 2 years experience

## Competency training standard

### Tasks

	Title
1	<b>Joint Developer/Analyst Workshop Capstone Scenario</b> In this workshop, Analysts and Developers will confront a real-life, quick-response scenario.
2	<b>Cultivating Technical Programming Skills and Techniques:</b>
3	<b>Building Tools that Enable Analysts to Make Correlations Across Data Types:</b>
4	<b>Developing Intangible Qualities for Technical Success</b>

Training standard  
Contents analysis form

<b>Title:</b> Joint Developer/Analyst Workshop Capstone Scenario In this workshop, Analysts and Developers will confront a real-life, quick-response scenario.	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
<b>Knowledge and Skill:</b> <ul style="list-style-type: none"> <li>• Work in a team with other developers and analysts (product owners/end users)</li> <li>• Deliver tools based on analyst requirements as driven by the scenario</li> <li>• Offer potential technical solutions to analytic challenges</li> <li>• Contribute to analytic progress through capstone scenario through software tool development</li> <li>• Practice extreme programming (XP) techniques in a realistic environment</li> <li>• Get exposure to operational requirements and available technologies and data sources</li> <li>• Engage with end users to develop a quick-turn solution to their technical challenges</li> <li>• Impart technical concepts to analyst counterparts in order to explain tool function/technology options</li> <li>• Experience how software development can speed up operational success</li> <li>• Experiment with strategies and techniques for rapid prototyping</li> </ul>	Determined by the instructor			According to the trainer
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard  
Contents analysis form

<b>Title:</b> Cultivating Technical Programming Skills and Techniques:	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
<b>Knowledge and Skill:</b> <ul style="list-style-type: none"> <li>• Deployment and integration of Graph Databases</li> <li>• On-demand and persistent analytic modeling</li> </ul>	Determined by the instructor			According to the trainer
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				



Training standard

Contents analysis form

<b>Title:</b> Building Tools that Enable Analysts to Make Correlations Across Data Types:	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
<b>Knowledge and Skill:</b> <ul style="list-style-type: none"> <li>Extracting relevant context from multiple data streams</li> <li>Uncovering clues from social media sources</li> </ul>	Determined by the instructor			According to the trainer
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard

Contents analysis form

<b>Title:</b> Developing Intangible Qualities for Technical Success	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
<b>Knowledge and Skill:</b> <ul style="list-style-type: none"> <li>Decompose ABI analytic needs into technical requirements</li> <li>Prove your effectiveness in high-operational temp, high-pressure environment</li> </ul>	Determined by the instructor			According to the trainer
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				