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Title: Proposal for student entry profile into software projects under the ISO/IEC 29110 standard

Authors: Arredondo-Salcedo, Daniel, Salas-Guzmán, Manuel Ignacio and García-Molina, Yolanda Meredith

- Instituto Tecnológico Superior Zacatecas Norte KZV-0854-2024 0000-0003-3236-4880 316030
 Instituto Tecnológico Superior Zacatecas Norte LBH-6694-2024 0000-0002-7039-2703 316159
 Instituto Tecnológico Superior Zacatecas Norte LBH-6716-2024 0000-0001-9906-1791 696439

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ECORFAN-México, S.C.

Park Pedregal Business. 3580,

Anillo Perif., San Jerónimo

Aculco, Álvaro Obregón,

01900 Ciudad de México, CDMX,

Phone: +52 1 55 6159 2296

Skype: ecorfan-mexico.s.c.

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Introduction

This article explores the integration of ISO/IEC 29110 into software engineering training programs, highlighting the essential technical and soft skills that students must develop to be competitive in the industry.

The main objective of this study is to identify and analyze the key competencies that should be instilled in future software engineers, as well as to evaluate the effectiveness of the ISO/IEC 29110 standard in improving the educational process and in preparing students for the labor market





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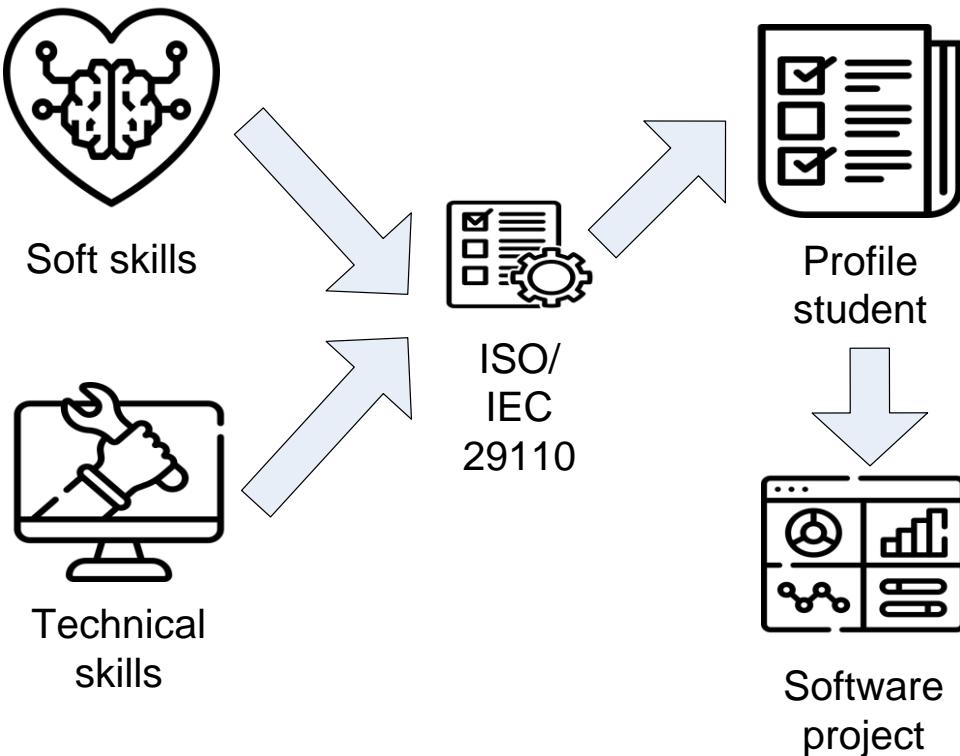


Methodology

In this article, a bibliographic exploration was carried out regarding the key skills of software engineers.

Subsequently, the official documentation of the ISO/IEC 29110 standard was examined to identify the roles of the work team and the objectives of the basic profile processes

Student entry profile ISO/IEC 29910





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Results (1)

In general, it is desirable that new members who join a team under the ISO/IEC 29110 standard meet and develop some general skills

Soft skills

- Teamwork
- Assertive communication
- Proactivity
- Critical thinking

Technical skills

- Management of collaborative and project management tools
- Adherence to processes





Results (2)

By individually analyzing each role, desirable technical and soft skills were identified to fulfill responsibilities and activities



Role	Soft skills	Technical skills
Analyst	<ul style="list-style-type: none">• Integrity• Humbleness	
Designer	<ul style="list-style-type: none">• Analysis and resolution of problems• Self-learning	<ul style="list-style-type: none">• Quality focus• Programming Knowledge
Programmer	<ul style="list-style-type: none">• Analysis and resolution of problems• Integrity• Self-management• Self-learning	<ul style="list-style-type: none">• Quality focus• Programming Knowledge
Project Manager	<ul style="list-style-type: none">• Integrity• Self-management• Empathy• Responsibility• Leadership• Humbleness	<ul style="list-style-type: none">• Project management• Risk management• Quality focus• Knowledge of methodologies
Technical Leader	<ul style="list-style-type: none">• Analysis and resolution of problems• Empathy• Self-management• Responsibility• Leadership• Humbleness	<ul style="list-style-type: none">• Risk management• Project management• Knowledge of methodologies



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Conclusions

The adoption of the ISO/IEC 29110 standard in Software Development Centers (SDCs) frames a dynamic of professional training through projects framed in a quality approach, allowing students to participate in projects in real conditions and develop skills that allow them to be competitive and generate quality products.

This article highlights the desirable skills for new students who will join work teams under the ISO/IEC 29110 standard, among the most basic are: Teamwork, Assertive communication, Proactivity, Critical thinking, Use of collaborative tools and project management and adherence to processes.

It is important for SDCs to establish mechanisms to diagnose and train new members, with the aim that their incorporation into the new team is more enriching



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Differences.

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