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IEEE Standard for Software Quality Assurance Processes

IEEE Computer Society

Sponsored by the
Software & Systems Engineering Standards Committee

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USA

IEEE Std 730™-2014
(Revision of
IEEE Std 730-2002)

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IEEE-SA Standards Board

Abstract: Requirements for initiating, planning, controlling, and executing the Software Quality Assurance processes of a software development or maintenance project are established in this standard. This standard is harmonized with the software life cycle process of ISO/IEC/IEEE 12207:2008 and the information content requirements of ISO/IEC/IEEE 15289:2011.

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Introduction

This introduction is not part of IEEE Std 730™-2014, IEEE Standard for Software Quality Assurance Processes.

IEEE Std 730 has been a benchmark for Software Quality Assurance (SQA) professionals since it was first published in 1979. While previous versions of IEEE Std 730 provided an SQA plan outline this revision expands the scope of this standard to address the processes defined in software life cycle framework standard, ISO/IEC/IEEE 12207:2008. This change in emphasis is consistent with and elaborates the process requirements in ISO/IEC/IEEE 12207:2008.

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IEEE Standard for Software Quality Assurance Processes

1. Overview

1.1 Scope

This standard establishes requirements for initiating, planning, controlling, and executing the Software Quality Assurance (SQA) processes of a software development or maintenance project. This standard is harmonized with the software life cycle process of ISO/IEC/IEEE 12207:2008[1] and the information content requirements of ISO/IEC/IEEE 15289:2011.

NOTE—Annex A presents detailed explanations and mappings between ISO/IEC/IEEE 12207:2008 and IEEE Std 730™-2014 subclauses.[2]

1.2 Purpose

The activities described in this standard are intended to enable the software project to use the SQA processes to produce and collect evidence that form the basis for giving a justified statement of confidence that the software product conforms to its established requirements. The purpose of this standard is to provide uniform, minimum acceptable requirements for SQA processes in support of a software project. In considering adoption of this standard, regulatory bodies should be aware that specific application of this standard may already be covered by one or more IEEE or ANSI (American National Standards Institute)

[1] Information on normative references can be found in Clause 2.
[2] Notes in text, tables, and figures of a standard are given for information only and do not contain requirements needed to implement this standard.