Software Construction

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2015
SWEBOK®
V3.0

Guide to the Software Engineering Body of Knowledge

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IEEE
computer society

http://www.computer.org/web/swebok/v3
Sw Construction

* creation of working software
* coding
* verification
* unit testing
* integration testing
* debugging
SC Fundamentals

* minimising complexity
* anticipating change
* constructing for verification
* reuse
* standards
Managing SC

* construction in life cycle models
* construction planning
* construction measurement
SC Practice

* construction design
* construction languages
* coding
* construction testing
* construction for reuse
* construction with reuse
* construction quality
* integration
SC Technologies

- API
- OO runtime
- parameterisation & generics
- design by contract
- fault tolerance
- executable models
- state-based & table-driven
- runtime config
- grammar-based input processing
- concurrency
- middleware
- distributed systems
- heterogeneous systems
- performance analysis & tuning
- platform standards
- test-first
SC Tools

* IDEs
* GUI builders
* unit testing
* profiling
* slicing