The role of 15822 in Education

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Why should academia need a standard?

- Textbook surrogate, complete picture:
- 830-1998 - IEEE Recommended Practice for Software Requirements Specifications
- 829-2008 - IEEE Standard for Software and System Test Documentation – Redline
- 730-2014 - IEEE Standard for Software Quality Assurance Processes
- 1028-2008 - IEEE Standard for Software Reviews and Audits
- CMMI for Development, Version 1.3
- Kernel and Language for Software Engineering Methods (Essence) Version 1.0, OMG
- The Guide to the Software Engineering Body of Knowledge version 3
- http://www.uml-diagrams.org/

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Why should academia need a standard?

- Teacher's analysis:
- My own project course for D and U:
  - External customer
  - Roles
  - Teamwork
  - Project Monitoring and Control
  - Changing requirements
  - Documentation

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Agreement	Organizational Project-Enabling	Technical Management	Technical	Technical (cont'd)
Acquisition	Life Cycle Model Management	Project Planning	Business or Mission Analysis	Integration
Supply	Infrastructure Management	Project Assessment & Control	Stakeholder Needs & Requirements Definition	Verification
	Portfolio Management	Decision Management	System Requirements Definition	Transition
	Human Resource Management	Risk Management	Architecture Definition	Validation
	Quality Management	Configuration Management	Design Definition	Operation
	Knowledge Management	Information Management	System Analysis	Maintenance
		Measurement	Implementation	Disposal
		Quality Assurance		

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Next stop

- **Course in Analysis and Maintenance**

- **Understand product and process of a large open-source project**

- **Commit a change**

Next, next stop

- Multi-disciplinary systems engineering courses
- Walk through 15822
- Constantly ask: How do you...
  - describe an architecture
  - describe configuration
  - evaluate alternatives
  - verify a system
  - ...

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