Define Requirement Types/Classes

- Composition Elements - cells, designs, design reuse, macros, cell libs, circuits, elements
- Hierarchy - definition, instance, occurrence, configuration,
- Design management - identification, versioning, alternatives, configuration, definitions, interface,
- Test - test plan, test requirements, test H/S, vectors (observe/control), test bench/stimulus
- Topology - logical, structural, syntax
- Physical - area utilization
- Cost - material, labor, design, mfg, support, redesign, schedule
- Domains - digital, analog, mechanical, acoustic, light, mixed
- Decision - (don't) care
- General - definition, internal composition, interface (semantics, syntax)
- Deterministic - non..., (un)bound,
- Environment
- Signals - information, energy, material flow, token, protocol, channel/band,
- life cycle - cost, schedule, ...
- Power - control & consumption, distribution, flow
- Process - activation (when), guard, transformation, constraints, interaction, decision, flow control,
- Architecture - Control, dataflow, memory
- Reliability, quality, quality assurance, availability, design intent
- temporal - sequence/sequential, clock, state machine, process, state (dynamic), coherent, (a)synch, concurrent,
- functional organization - hierarchy
- Allocation, partitioning, decomposition
- Support for simulation, analysis, regression,
- implementation approach
- architecture approach

Define Associated Requirements Actions / Attributes

- Static, dynamic, temporal, (non)deterministic, consistent, coupled, context-sensitive
- Semantic consistency
- Granularity, templates, macros, models, views, policy, category, set/collection,
- bound, intent, association, interpretation, assignment, map
- continuous, contiguous, (re)allocation, incremental, parallel, distributed, heterogeneous, tracking
- Attribute - property, condition, constraints, specification, requirement
  Aggregation - queue, table, index, taxonomy, composite, parts, primitive, encapsulation, scope, refinement, inheritance, formal, executable, orthogonality, reusability
- cost, schedule, plan, milestone, declarative, decomposition
- Expression, generality, simplicity, compilable, synthesis, verifiable, model of computation
- prototyping - conception, virtual, HW, SW, H/S, modeling
- decision making
- constraint generation
- Requirements capture
- View to integrated definition
- How to use models without knowing how they work
- primary, derived requirements
- User interface - GUI / graphics,
- Multilevel, multidomain
- validation - (by) construction, verification, simulation, testing, intuition, assertion
• heterogeneous - homogenous