

Lucas Architecture Academy

Sessions

1: Architecture overview

- Architecture requirements
- Architecture styles
- Architecture views
- Notations: UML, SDL, etc.
- Documenting and communicating architectures
- Role of an architect

2: Technical management of projects

- Managing requirements
- Incremental development
- Estimation techniques
- Technical part of planning
- Efficient technical decision structures
- Steering group

3: Architecture technologies

- Object oriented frameworks and patterns
- Middleware (COM, Corba, EEJB, ...)
- Hardware abstraction layer
- Reference architecture
- Verifiable architecture
- Non-functional properties (real-time, distribution, fault-tolerance, safety...)

4: Supporting technologies

- Development tools
- Requirement management tools
- Design and test tools
- Configuration management tools
- Development processes: RUP, XP and CMM-I
- Fundamentals and how they can support the architecture

5: Product and system management

- Product life cycle management
- Product line architectures
- Producing business cases

6: Architecture assessments

- SEI'S ATAM and SAAM
- Key project assessments
- Practical assessments done in cross company teams on real projects
- Results discussed in separate session

Lucas Architecture Academy is a forum for current and upcoming architects. During a 10 months part time program experienced practitioners and Lucas researchers have seminars, evaluations, and discussions on topics related to advanced software architecture. A typical 10 month program consists of 6 sessions, each 2-3 days off site.

Advantages for participating companies

- A practical and tailored program for educating their architects
- Argument for attracting talented people
- A systematic way of co-operating with Lucas
- Learn from peers in other companies

Advantages for Lucas research

- A systematic way of co-operating with companies
- Generate ideas for research
- A framework for research with companies on architecture-related topics
- The LUCAS Architecture Academy is given as a Ph.D. course

The Lucas Architecture Academy is organized as a commissioned education. The participants receive five credits.



Organisation

Participation - companies

LUCAS Gold members:

- Max 6 participants per year
- Participant in steering group selecting topics
- Strong influence on case studies

LUCAS Silver members:

- Max 2 participants per year

LUCAS Bronze members and other companies:

- Participation at the cost of 22 500 SEK (2003/2004) per participant
- Extracts from some sessions are presented as open Lucas seminars

Steering group

- Gold member representatives
- Lucas steering: Boris Magnusson, Per Runeson, Karl-Erik Årzén, Even-André Karlsson

Contact

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