Systems Engineering
Courses spring 2010

HØGSKOLEN i Buskerud

SDOE 650 System Architecture and Design

Date: **11. – 15. January 2010**

Target group: Master students 1. year, course participants

Course description: This module presents the fundamentals of system architecting, including practical heuristics for developing good architectures. It extends the systems engineering process introduced in SDOE 625 through functional analysis, decomposition and requirements flow-down. The implications of open systems architectures and the use of commercial technologies and standards (COTS) are explicitly addressed, as are the linkages between the early architectural decisions, driven by customer requirements and the concept of operations, and system operational and support costs. Prerequisite: SDOE 625 or equivalent.

Registration deadline: **5. January 2010**

SDOE 640 System Supportability and Logistics

Date: **18. – 22. January 2010**

Target group: Master students, course participants

Course description: This module addresses the development and optimized allocation and location of the numerous elements of system logistics support to ensure that a system satisfies its business and operational readiness requirements and effectiveness. Particular focus is placed on the concept of integrated supply chain and demand management, and the optimization and allocation of a system's logistics resources to ensure maximum availability at the lowest investment in logistics resources. Participants will also be introduced to the latest thinking and technologies with regard to system training, documentation, inventory management, and transportation

Registration deadline: **12. January 2010**

SDOE 612 Project Management of Complex Systems

Date: 12. – 16. April 2010

Target group: Master students 1. year, course participants

Course description: A project is a temporary endeavor undertaken to create a unique product or service. Project management is the application of knowledge, skills, tools, and techniques accomplished through five linked processes for initiating, planning, executing, controlling, and closing work to meet a set of defined requirements. This project-based module exposes students to tools and techniques useful for the effective management of systems engineering projects. Tools and techniques for project definition, work breakdown, estimating, resource planning, critical path development, scheduling, project monitoring and control, and scope management are presented.

Registration deadline: 23. Mars 2010

SESA 6201 Advanced Systems Architecting

Date: 22. – 26. February 2010

Target group: Senior Engineers with experience from system architecting or design.

Course description: Decomposition of business processes: primary process, product creation, technology, people and process management, and policy and planning; system architecting, marketing and project management.
Roles, tasks and responsibilities of a system architect; architectural styles.
Requirements elicitation, key drivers, understanding customer context.
Architect toolbox; CAFCR model, story-telling, basic working methods of the architect. Road mapping; market, product, technology, process and people road mapping, road mapping process, visualization, strategy. Product families, generic developments, reusable assets; process and organization, feedback, advantages and disadvantages. Documentation; decomposition, requirements, reviewing.
Role of software; characterization of technologies, application, integration.
Communication with management; presentation, style, language and form, interaction.

Registration deadline: 12. February 2010

Praktisk informasjon

Undervisningsform
Undervisningene er lagt opp som intensivundervisning. I kursuken vil undervisningen foregå fra 0830 til ca 1630 hver dag. Det vil være en blanding av forelesninger og gruppearbeid. For våre masterstudenter og for de som ønsker det av andre kursdeltagere, avsluttes kurset med en innleveringsoppgave som er individuell og som skal leveres inn 10 uker etter siste kursdag. Leverer du inn oppgaven, og får den godkjent, vil du få studiepoeng for kurset.

Undervisningsspråk
Undervisningsspråket er engelsk; både skriftlig og muntlig.

Undervisningssted
All undervisning foregår i Høgskolens lokaler på Kongsberg.

Pris
Prisen på kurset er avhengig av om du leverer inn oppgaven eller ikke

- Alt. 1: Kun kursuken kr.20.000,-
- Alt. 2: Kursuke + innlevering av oppgave/eksamen kr.25.000,-

Kursprisen inkluderer i tillegg til undervisning: alt studiemateriell, kaffepauser og lunsj alle dager i kursuken, samt veiledning og retting av oppgave (alt 2)

Påmelding
Påmelding skjer per mail til Merete Ræstad Faanes, **merete.r.faanes@hibu.no**

Påmeldingsfrist
Se hvert enkelt kurs.
Etter påmeldingsfristen fyller vi opp eventuelt ledige plasser fortløpende.Vi har begrenset med plasser på alle kurs, så det lønner seg å være tidlig ute med påmeldingen.

Kontakt oss

- Faglige spørsmål: Gunnar Berge, **gunnar.berge@hibu.no**
- Praktiske spørsmål: Merete Ræstad Faanes, **merete.r.faanes@hibu.no**
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