



SCIENCE, ENGINEERING & TECHNOLOGY

Course in Systems Engineering Management (3 – 7 August 2015)

BRIEF DESCRIPTION

A project manager remains responsible and accountable for the overall success of a project whereas a systems engineer remains responsible for management of the systems engineering and other engineering activities of the project. Some causes of project failure can be traced to poor systems engineering management, and/or poor integration between the management responsibilities of the systems engineering manager and project manager. The focus of this course is therefore on systems engineering management, where the delegates will be exposed to relevant management principles, processes and standards, and the development of the Systems Engineering Management Plan, generally known as the "SEMP". A further source of failure in projects, even those that follow all the correct standards and processes, are inexperienced and under-performing systems engineering teams. Even when individual team members are competent, poor allocation of responsibilities and the inability to effectively work together can sink many good projects. The last module therefore will provide the delegate with the necessary tools, processes and understanding on how to build high performance teams.

COURSE CONTENT

The certificate comprises of the following modules and related content:

Systems Engineering Management (2 days)

- Overview of the system life cycle
- Introducing management
- Introducing project management models (PMBOK, PRINCE2, Agile project management such as SCRUM)
- Systems engineering management models
- Difference between project management and systems engineering management
- Management responsibilities

- Organizing systems engineering management
- Management metrics
- Systems engineering management planning, formal plans
- Technical design reviews and audits
- Managing change
- Case study

Building High Performance Teams (3 days)

- Leadership styles; identifying your own
- Leadership vs. Management; what are the differences?
- Organizing for success
- Role of organizational culture
- Motivating your team
- Decision making
- Importance of communication
- Taking ownership of a project
- Managing stress; dealing with conflict
- Behaviour patterns and their role; influencing behaviour patterns
- Importance of team building
- Assessing team performance
- Case studies, practice sessions

LEARNING OUTCOMES

Delegates who successfully complete the modules on Systems Engineering Management and Building High Performance Teams will be able to:

- Plan and structure the systems engineering effort of the project
- Develop a coherent and effective SEMP, and understand its interfaces with the overall Project Plan
- Identify and source high performing team members, structure and build a high performance systems engineering team



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DELIVERY MODE OF COURSE

Class contact sessions

ASSESSMENT

Group assignments and an individual assignment

CPD ACCREDITATION

This course is accredited by the Engineering Council of South Africa (ECSA) and course participants will be eligible to claim 5 Continued Professional Development (CPD) points. The verification number is P003313-2015.

COURSE FEE

R18, 800.00 (VAT inclusive) per participant

The fee includes:

Extensive course notes for each module

Refreshments and lunch

Suitable training venue

The full fee should be paid at least two weeks before commencement of class.

CONTACT DETAILS

Registration and Enquiries

Nocwaka Combo(Course Coordinator)

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For Course Content Information

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