

“Simulation has a critical role in helping Defence deliver complete Force options.”

Defence Simulation Roadmap 2007



Front cover and above image courtesy of Cranfield University

ABOUT US:

Cranfield University

Cranfield University is the academic provider to the Defence College of Management and Technology (DCMT) at the Defence Academy in Shrivenham, UK. Cranfield has more than 400 staff who work closely with the military staff of the academy to deliver its educational and research programs.

The college's remit is to impart to its students a wider and deeper understanding of defence technology and management. Masters level programs are delivered to more than 1000 students a year in a variety of subject areas that includes Defence Technology, Executive Leadership, Corporate Management, Business Skills, and Security and Resilience.

The University of Adelaide

The University of Adelaide is a member of G08, the group of eight leading research-intensive universities in Australia. It has strong links with Defence and Industry, including a strategic alliance with DSTO and two funded chairs in Photonics and Microwave Radar. The University of Adelaide is the first academic institution to be granted associate membership of Rapid Prototyping, Development and Evaluation (RPDE). It is also a member of the Defence Teaming Centre (DTC) and a member of the Continuing Education Initiative (CEI) for defence personnel. The Centre for Defence Communications and Information Networking (CDCIN) at the university widely consults to Defence and Industry on communication systems analysis and systems modelling and simulation.

COURSE FEES

The fee for the 3-day course is \$2,150 (inc GST) per person. This includes lunch and tea for the 3 days.

COURSE REGISTRATION

To register for the course, visit:
www.cdcin.adelaide.edu.au/DefSimWeek

FOR FURTHER INFORMATION

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COMING SOON

November 25-27, 2008 at the National Wine Centre in Adelaide: An Advanced Course in Modelling and Simulation of Defence Systems.

This course explores the intricacies of planning, developing, integrating and testing models and simulations of various defence systems. It will be jointly delivered by Cranfield University and the University of Adelaide.

INTRODUCTION TO MODELLING & SIMULATION OF DEFENCE SYSTEMS

An introductory course for developers, managers and users of modelling and simulation in Defence and Industry.



JULY 16 -18, 2008
NATIONAL WINE CENTRE, ADELAIDE



This course has the support of the Simulation Industry Association of Australia (SIAA). A key objective of the SIAA is the Professional Development of simulation personnel.



PROGRAM:

This course provides an in-depth understanding of the nature of systems modelling and simulation in defence projects. It aims to equip developers, managers and users in modelling and simulation projects with practical insights into successfully accomplishing their respective tasks. The course materials have been jointly developed and will be delivered by experts with defence industry experience from the Centre for Defence Communications and Information Networking (CDCIN) at the University of Adelaide and the Defence College of Management and Technology (DCMT) at the University of Cranfield, UK. The course includes case studies, group activities and hands-on exercises.

DAY 1 COURSE OUTLINE

Module 1: Fundamentals of Systems Modelling and Simulation

- Industry standard definitions and nomenclature
- Modelling and simulation as one test-bed in a continuum
- Modelling paradigms and simulation techniques
- The costs versus benefits of modelling and simulation

Module 2: Developing a Modelling and Simulation Capability

- Fundamental inputs to a modelling and simulation capability
- Live, virtual and constructive domains
- Modelling and simulation infrastructure
- Modelling and simulation tools and standards

DAY 2 COURSE OUTLINE

Module 3: Managing Modelling and Simulation Projects – Part 1

- Roles of modelling and simulation within the project cycle
- Modelling and simulation within systems engineering
- Modelling and simulation process development
- Costing modelling and simulation activities

Module 4: Managing Modelling and Simulation Projects – Part 2

- Requirements derivation
- Fidelity versus accuracy
- Verification, validation and accreditation
- Demonstrating value addition

DAY 3 COURSE OUTLINE

Module 5: Modelling and Simulation in Defence Experimentation

- Introduction to defence experimentation
- The planning process for experimentation
- Managing stakeholder engagement
- Ascertaining user experience with and without modelling and simulation

Module 6: Habits of Highly Effective Modelling and Simulation Personnel

- Common mistakes made when developing models
- How not to manage modelling and simulation projects
- Setting user expectations for modelling and simulation outcomes
- The three laws of modelling and simulation