

Training in Aerospace, Avionics & High Tech Systems

Organised by
Training Cell
Indian National Society for
Aerospace and Related Mechanisms
(INSARM)

**For Academic / Industrial /
Research Community**

**To share Product Design Engineering
and Management Competence.
Focus on skills required for
higher levels of technology**

INTRODUCTION

Globally many developing Nations has learned now that the only way to fast development and progress is based on the knowledge based economy. This is shaping the way national strategies are being made. The prominent approach seems to be focused on high technologies, including Aerospace. Empowering engineers and managers for this policy shift is vital at this stage. INSARM likes to contribute in this effort by providing training & workshops on multidisciplinary topics based on the experience and expertise available within INSARM members.

“I hear and I forget. I see and I remember. I do and I understand.” – Confucius

- Training develops skills that increase your team’s productivity and the quality of their work & product.
- Well trained staff are more engaged, with higher morale and initiative, which helps you retain your best people.
- Timely training is imperative if you’re going to mitigate risk in the face of ever-changing legislative and market challenges.
- It has been widely reported that university graduates need to be better prepared for the workplace. From the hands-on training, the student learns about the skill sets required, demands of the industry and also work ethics.
- These programmes can be of mutual benefit for employers because they benefit from the quality of support, fresh ideas and energy that the trainee brings into the work environment.

INSARM

INSARM is one of the foremost technical societies of scientists, engineers, and managers engaged in the design engineering & management domain, including realisation of complex aerospace, defense and other sophisticated mechanisms in India. The society was inaugurated by Dr. APJ Abdul Kalam, former president of India in 1999 at Hyderabad. The society has its chapters in all major Aerospace centers viz. Thiruvananthapuram, Bengaluru, Hyderabad, Pune and Agra. Members are from ISRO, DRDO, HAL, NAL, IISc, IIST, and Premier engineering colleges. The current INSARM national president is, Dr. K M Rajan, Distinguished Scientist and Director, Pune, Indian National Society for Aerospace and Related Mechanisms (INSARM) is organizing specialized training programs to empower engineers, managers and other professionals in India and abroad.

OUR ADVISORS

Dr. G. Madhavan Nair
Former Chairman ISRO
Former president IFA

Mr. Avinash Chander
Former Director
General, DRDO
Scientific advisor,
Raksha Mathri

Mr. PS Veeraraghavan
Former Director,
VSSC/ISRO

OBJECTIVES

- Share design engineering capability and management competence
- Enhance research and industrial culture
- Improve creativity, innovation problem solving and decision making
- Focus on skills required for higher levels of technology

TARGET GROUP

Engineers/ managers from high tech industries, entrepreneurs, start ups.
Academic community , both faculty and graduate engineering students,

OUR FACULTY

Former senior engineers and scientists from ISRO & DRDO, well experienced in high-tech product design, development and quality management. We have a panel of highly qualified and experienced experts in various disciplines.

VENUE

Custom made training programmes at Thiruvananthapuram, Kerala, India or at selected cities in India and abroad.

DURATION

The programme topics & duration can be tailored to suit the industry/ organisations requirements

FEES

Depends on the training programme and duration

CONTACT ADDRESS

Contact persons for registration and further clarifications / details:

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TOPICS (List attached)

Standard Programs Available			
<ul style="list-style-type: none"> • Product Design Engineering & Management • Precision Manufacturing • System Engineering • System Integration • Design & Analysis Tools • Test & Evaluation 	3 day 2 day 2 day 2 day 2 day 2 day	<ul style="list-style-type: none"> • Quality & Reliability Management • Achieving Zero Defect by Robust Design • Leadership by Strategic Innovation • High Technology Management • Mechanisms 	2 day 2 day 2 day 2 day 2 day

Programs Based on Request from Customer Organization	
1.Career Skills <ul style="list-style-type: none"> • Employability • Entrepreneurship • Career Growth 	<ul style="list-style-type: none"> • Teaching skills • Technical writing • Leadership & Team Management
2.Soft / Life Skills <ul style="list-style-type: none"> • Critical thinking • Creative thinking • Problem Solving • Decision Making • Effective communication 	<ul style="list-style-type: none"> • Interpersonal relationship • Self-awareness • Stress Management • Emotional Intelligence • Empathy
3.Design Related Skills <ul style="list-style-type: none"> • Technology Readiness Assessment • Pre-Project Activities • Concept Design • Preliminary Design • Detailed Design • Design for Manufacturing • Design for Assembly • Design for Integration • Design for Reliability • Design Management 	<ul style="list-style-type: none"> • Robust Design methods • Cost effectiveness & Value engineering • Cascading & Concurrent design • Configuration & Change Management • Analysis & validation • Test & Evaluation • Quality management of design • Design for Six Sigma • IPR
4.Mechanisms <ul style="list-style-type: none"> • Launch Vehicle Mechanisms • Satellite Mechanisms • Aircraft Mechanisms 	<ul style="list-style-type: none"> • Pyro devices • Hydro-Mechanical Systems

<p>5.Propulsion</p> <ul style="list-style-type: none"> • Solid Propulsion • Liquid Propulsion • Cryogenic Propulsion 	<ul style="list-style-type: none"> • Advanced Propulsion • Future Propulsion
<p>6.Manufacturing Technology</p> <ul style="list-style-type: none"> • Traditional Manufacturing • Advanced Manufacturing 	<ul style="list-style-type: none"> • Future Manufacturing Methods
<p>7.Assembly & Integration</p> <ul style="list-style-type: none"> • Integration of electronic systems 	<ul style="list-style-type: none"> • Integration of Mechanical Systems
<p>8.Quality Management Skills</p> <ul style="list-style-type: none"> • QM concepts • Basic QC tools • Advanced QC tools • Quality Management Tools • ISO 9000 / AS 9100 • Product Assurance Management • Design for Six sigma 	<ul style="list-style-type: none"> • Six Sigma • Lean Six Sigma • Mistake Proofing • Zero Defects Program • Kaizen - Continual Improvement • Preventing Problems & Failures • Total Quality Management (TQM)
<p>9.Management Skills</p> <ul style="list-style-type: none"> • Career Growth • Managing & Directing • Strategic management • Organizational Culture • Leadership & Teamwork • Communication & Motivation 	<ul style="list-style-type: none"> • Stress & Time Management • High Performance & Productivity • Intelligence & Ethics • Knowledge Management • Research & development • High tech project management
<p>10.Materials Technology</p> <ul style="list-style-type: none"> • Metallic Materials • Carbon Fibre Processing • Composite Product Design 	<ul style="list-style-type: none"> • Composite Products Manufacturing • Composite Products Quality Control • Composites NDT