



Title:	<b>“SPACE SYSTEMS ENGINEERING”</b>	Date:	February 19th 2013
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<b>What is</b>	<p>This seminar gives a broad view of space missions, and gives an insight into the working of its systems and how they interact one each other. Spacecraft users will understand why spacecraft takes that form. Subsystem specialists will have an opportunity to review their own area of expertise in the context of the total vehicle. However the seminar has a great value for any people working with spacecrafts and space business. A space mission is essentially a compromise. It represents the best overall solution to the user requirements of a large number of elements including the spacecraft, launch vehicle and ground segment. All of these systems interact strongly with each other but they must work in harmony. The lectures cover, among other, the following topics: overall systems approach to spacecraft design, space environments such as 'glow', AO erosion and orbital debris; celestial mechanics; mission analysis; launch vehicles; attitude determination and control; reentry; propulsion; electrical power; thermal control; spacecraft structures; on-board data handling; software; telecommunications; ground control; assembly, Integration and test engineering.</p>
<b>For who</b>	Students of Aerospace Engineering Universities, young graduates, entrepreneurs, investors, spacecraft users, spacecraft users, system analysts, any people dealing with spacecrafts and space business.
<b>Type</b>	Classroom-type instruction and interaction.
<b>Duration</b>	<p>8 hours (1 day) - introduction          24 hours (3 days) - advanced stage.          More extended course, to be defined according to the Customer's needs.</p>
<b>Where</b>	The seminar can be held at the customer premises, with logistics supplied by the customer, or it can be organized by ASE LTD, grouping together several attendees having similar requirements and profile.
<b>Benefits</b>	<p>At the end of the seminar, according to the chosen level of detail, students will be able to:</p> <ul style="list-style-type: none"> <li>- know all of the matters involved in the project and operation of spacecrafts;</li> <li>- understanding space mission conceptual design and basic requirements;</li> <li>- have elements for an estimation of the costs related to manned and unmanned space missions.</li> </ul> <p>Interest profiles: propensity to innovation; curiosity and hunger for knowledge, a desire to look beyond own and mankind borders; motivation to search; interest in looking at the problem from different points of view, a systemic multidisciplinary approach; interest in personal growth and professional training; high-profile career paths, interest in specialized courses on the subject; ability to develop graduation works with clear international significance in terms of innovation.</p>
<b>Deliverables</b>	Electronic copy of the materials used during the seminar: slides, documents, materials produced during exercises.
<b>Teachers</b>	<p>The lead trainer, <b>Dr. Rino Russo</b>, has a PhD in aerospace engineering and specializes in fluid dynamics, hypersonics, re-entry and space transportation. He has over 25 years of experience with unmanned space systems. He is a lecturer for the Masters Degree in Space Transportation Systems and Satellites and Space Platforms at the University La Sapienza, Rome. For most part of his professional career, he served as manager and head of the space department at CIRA (Centro Italiano Ricerche Aerospaziali). In particular, he served as head of President's Office for Institutional Relations Development, Head of the Space System Div, Head of Space Labs &amp; Facilities Division including the 70MW Plasma Wind Tunnel SCIROCCO, Head of the Space Programs Management Division, Program Manager of the USV (Unmanned Space Vehicles Program and Director of USV Drop Trans- and Supersonic Flight Tests campaigns. Gennaro -- aimed by a strong passion for astronautics -- holds a great attitude to transmit his huge know-how, both technical and philosophical, to young and less young people.</p> <p>Please also see: LinkedIn: <a href="http://www.linkedin.com/pub/gennaro-russo/b/680/44">http://www.linkedin.com/pub/gennaro-russo/b/680/44</a></p>
<b>Registration</b>	E-mail <a href="mailto:info@spacerenaissance.org">info@spacerenaissance.org</a> – cell. +39.335.8244435



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Send us [your manifestation of interest for this seminar](#), you will be re-contacted, in order to:

- a) join an already scheduled session, *or*
- b) keep you in the list for a not yet scheduled session, *or*
- c) organize a session at your premises.

Please also specify:

- the seminar code(s) you are interested to: .....
- the number of participants to the class(es): .....
- skill and experience of the participants: .....
- your goals and expected benefits: .....
- where do you want the class(es) to be held: .....
- tell us your preferred planning: one day units, dates to be negotiated ....