

Roulo Consulting Inc. Background

RCI has provided structural analysis consulting and training services to the aerospace and transportation industries for 14 years.



Aerospace Analysis Boot Camps for:

Rocketry



Satellite



Military Aircraft and Weaponry



Railway / Commercial Products / Aviation



AEROSPACE ANALYSIS BOOT CAMP

INITIAL SIZING & HAND CALCS FOR
DESIGNERS & ANALYSTS

www.rouloconsulting.com



Instructor & RCI President

Roulo Consulting, Inc. (RCI) is an engineering consultancy founded by Eric Roulo specializing in structural mechanics, training, and project management. With a deep background in aerospace and defense contracting, we utilize the Pareto principle to focus on the 20% of the material that contributes to the majority (80%) of success. When consulting, we use these principles to provide fast and accurate early appraisals of designs and concepts. When training, the material is focused on just the need to know, day-to-day, practical execution, and ‘what do you do on Monday’ aspects of your job. We provide the framework, philosophy, templates, and tools to dramatically increase your teams effectiveness starting the day after our boot camps and training sessions. By combining our consulting and training services, we help our clients build great engineering teams while delivering your project on time and on budget.

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BOOT CAMP REGISTRATION

Standard Registration: \$1,495

Register 3 or More & Receive \$100 Each Off

VISIT
www.rouloconsulting.com

Hand Calcs and Initial Sizing Overview

This intensive course is meant to provide the attendee with directly applicable tools to get their jobs done. The emphasis is on tactical execution of structural sizing during the initial phases of a design to ensure the concepts will meet the requirements when more thorough analysis is completed later. The methods are all presented as functions to aid the attendee in understanding the influence of the various design parameters that drive the sizing of the structure. In addition to presentation and equations, digital copies of references are provided with Excel and MathCAD versions of the solutions provided to allow the users to implement the methods immediately. Each topic presented could be extended to one or more days of training. In fact, some topics are routinely given as multi-day sessions. This course is not like that and instead provides an 80/20 rule solution for most configurations seen in production and then provides the resources for the designer and analyst to investigate further as required. By emphasizing fast, accurate, and easy to understand sizing rules, designs can be set on the correct trajectory early in the development phase thereby reducing or eliminating the need to costly redesigns later. REGISTER NOW!

Agenda: 17 Major Topics

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| 1. | Problem Setup – Thinking like a Stressman |
| 2. | Loads and Loads Determination |
| 3. | Mechanics of Materials Primer |
| 4. | Materials & Material Allowable |
| 5. | Metallic Bolted Joints |
| 6. | Composite Bolted Joints |
| 7. | Lugs |
| 8. | Sizing and Analyzing Welds |
| 9. | Bonded Joints |
| 10. | Sizing of Beams |
| 11. | Sizing of Plates and Scaling Rules |
| 12. | Ultimate Analysis |
| 13. | Bearing Details & Detrimental Yield |
| 14. | Buckling and Stability |
| 15. | Sandwich Panels |
| 16. | Potted Inserts |
| 17. | Intro to Composites |

Networking event to follow Boot Camp

Future Boot Camps, visit: www.rouloconsulting.com/accelerate