



# Pyrrhus Software

*Enduring Solutions*

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## Black-Belt SPARK

A course for engineers who have already attended the "Software Engineering with SPARK" course or are experienced SPARK users. This course covers the advanced use of SPARK, particularly in the context of proof of exception freedom and code correctness. Attendees are taught to understand the relationship between SPARK source code and the verification conditions generated for proof, leading to an understanding of the impact of good SPARK design principles on code verification. Advanced facilities of the SPARK Examiner are presented, and tuition in planning, conducting and managing the verification activities is supplemented by the use of the SPARK proof tools, particularly the Simplifier.

The course has a strongly practical flavor, interweaving guidance and lecture material with topical tutorial sessions which reinforce the lecture material via relevant examples. Each tutorial session commences with a step-by-step example which provides detailed guidance, followed by additional exercises which can be tried in the tutorial sessions or used after the course to gain additional practical experience.

This 3-day course is designed for software engineers, managers, and regulators who are interested in enhancing their use of the SPARK toolset.

If you are interested in attending this course or having this course presented at your facility, please contact us at [training@pyrrhusoft.com](mailto:training@pyrrhusoft.com) or call us at 480-951-1019.