



Little
CMS2

Trainings

<https://www.littlecms.com>

Copyright © 2023 Marti Maria Saguer, all rights reserved.



Hello! My name is Marti Maria. I am the author of the Little CMS color engine. Thank you for considering our trainings on color management.

Little CMS business model is about paid training on open-source code, so you get the code for free and then our training allows your developers to use the asset quickly and in a correct way.

There are tons of courses on color management,

Why You should choose us?

Simple, because we actually **created** the color management software most others are using. If you just want to learn how to use a computer program, probably you don't need us. If you want to **understand** and **write color software**, then we can help.

Since learning how a color manager works is not trivial, in most cases the training takes just a small fraction of the money that would otherwise cost in terms of developer time. The engine has been around since about 1998 and it being used by thousands of companies with great success.

Takers for those courses are more than 20 companies some of them among the big names in color industry. I don't disclose the brands, although you are free to make public you took the training if you wish so.

I will impart the courses personally. Basically, you have 6 different tutorials / workshops to combine. A workshop does include exercises and requires a working C/C++ knowledge. A tutorial is for everyone. You can choose whatever combination you wish, or pick the packs: 1-day color science introduction for non-developers, 2-day Little CMS premier for coders or all together in a 3-day extended course for color experts, which is my personal recommendation.

Below you can find a short description of every workshop and the pricing. If you've got any further questions, please don't hesitate to contact me at marti.maria@littlecms.com

Hope to see you soon!

*Marti Maria Saguer,
The Little CMS project*

Courses/workshops

Color science essentials (tutorial)

Duration: 2 h.

This introductory course sets the basis for everything else on color management. Covered topics are human vision, why color management is needed, XYZ and L*a*b color spaces, the 2 degrees observer. The color matching functions. The sRGB color space. Adobe RGB and more recent color spaces like BT2020. Chromatic adaptation phenomena. Relative colorimetry. Spectral matching. Introduction to appearance models.

- **Intended audience:** Anybody wanting to expand their color knowledge. Decision-makers, Managers, Testers and Developers as well.
- **Requirements:** none. Introductory course for non-developers.

ICC based color management (tutorial)

Duration: 3 h.

How International Color Consortium (ICC) profiles works and how ICC framework implements color management concepts. The profile connection space (PCS). Types of profiles. Abstract profiles and device links. What is gamut and how to describe it. The ICC reference gamut. Rendering intents. Black point compensation. Absolute colorimetry. Color transformations. ICC Version 4 vs. Version 2. Named color profiles. Scene-referred workflows. Non-ICC property workflows.

Intended audience: Professionals wanting a deep knowledge of the ICC way to do color management

- **Requirements:** Basic knowledge of color science fundamentals. Working knowledge of Adobe Photoshop or similar

Color engine architecture for developers (workshop)

Duration: 2 h.

How a basic color manager could be implemented. This is the logical addition to the “ICC color management” tutorial, where the concepts are turned to code. At the end of this course the student should be able to create her own CMM dealing with a restricted set of ICC profiles. Finally, a short Introduction on how monitor, scanner and printer profilers works. Apple ColorSync and Windows ICM will be introduced as well.

- **Intended audience:** Developers wanting a deep knowledge of ICC way to do color management
- **Requirements:** Basic knowledge of color science fundamentals. Working knowledge of C/C++

Hands on Little CMS engine (workshop)

Duration: 3 h.

This workshop explores the API of Little CMS engine and provides working examples of most frequent use cases. The students will create small programs exercising Little CMS features. Profiles, color transforms, virtual profiles, adjustment layers with abstract profiles. Multi-profile transforms, color space transformations, CMYK special handling, multi-ink color spaces. Black point compensation, black preservation.

- **Intended audience:** Developers wanting knowledge of Little CMS color engine
- **Requirements:** Basic knowledge of color science fundamentals. Working knowledge of C/C++

Advanced use of the Little CMS engine (workshop)

Duration: 3 h.

This workshop extends the knowledge on Little CMS engine, exploring all plug-in system and advanced usage. Rounding strategies. Interpolation in 3D and higher dimensions. Performance considerations. Use of multi-core processors. GPUs and CUDA. The plug-in frame work. Replacing memory manager. Plug-in types. Use of plug-ins to embed property features. Smart CMMs.

- **Intended audience:** Developers wanting deeper knowledge of Little CMS color engine
- **Requirements:** Basic knowledge of color science fundamentals. Knowledge about Little CMS engine API. Working knowledge of C/C++

Color qualification and profile assessment techniques (workshop)

Duration: 2h.

Have you ever wondered how to look a printer plot to check color rendition? In this workshop for non-developers, we will explore the basic techniques of color assessment. How to evaluate color differences. How to know if a profile is good for its purpose. How to design a color qualification plan, how to measure printer accuracy. All with working examples.

- **Intended audience:** Anybody wanting to expand their color testing knowledge. Specially focused for testers and developers.
- **Requirements:** Basic knowledge of color science fundamentals.

Pricing

The prices are very competitive. I'm just charging 50 € or less per person and hour, which is **far below any other comparable training in the field**. Below you can see single training fees and pack discounts. The training language can be **English, Spanish** or **Catalan**.

Single training (2h/3h)

.....
100 € per person.

1 day color management essentials + color assessment (for non-developers)

.....
180 € per person.

2-day color essentials + ICC color management + hands on Little CMS + color assessment

.....
300 € per person.

3-day full course including all workshops

.....
350 € per person.

NOTES:

- Training would take place at your site
- Minimum absolute fee is 600 €, for example 1 person 1 course in Barcelona would not be 100 € but 600 € because organization costs.
- For any training in Europe but outside Barcelona, minimum fee is 3000 € to cover travel expenses.
- Maximum number of attendants is 20 because it is impossible to maintain quality standards over such number.
- If you reach 15 or more attendants (up to 20) the 3-day course rate is discounted to a maximum amount of 5000 €
- Overseas are possible, but minim/maximum rate may vary, please contact me for a personalized budget estimation (depends on the country)
- Each day will take 6 hours, being one hour of those devoted to breaks (unavoidable!)

Examples:

3-day full course in Barcelona for 3 people: $350 * 3 = 1050$ €

2-day course in Paris for 10 people, $250 * 10 = 2500$, but since this is below minimum = 3000 €

3-day full course in London, 20 people, $350 * 20 = 7000$, but since this is above maximum = 5000 €

Color science essentials for 100 people in Barcelona = sorry, 20 maximum, I want to keep good training quality

Thanks for your time. If you've got any further questions, please don't hesitate to contact me at marti.maria@littlecms.com