

A small guide to PDF/A files

What is a PDF/A?

A PDF/A file is an ISO-standardized version of PDF, which was specifically developed for long-term preservation of electronic documents. It is the format required by our **Regulation for the submission of doctoral theses** to deposit your thesis final version to our institutional repository, **E-theses**.

Create a PDF/A file

Microsoft Word

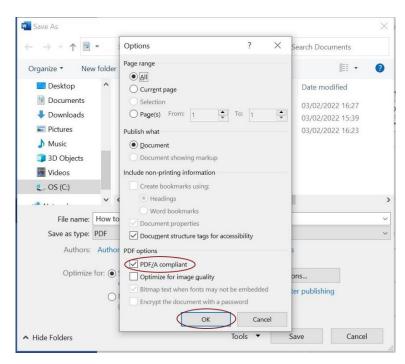
Before saving your file, it is necessary to update your PhD thesis metadata. Click "File" and then "info". Click "show all properties".

Here update your thesis metadata, specifying title, tags (keywords), subject (brief abstract), author's name (fig. 1).

Properties ~			
Size	16,0KB		
Pages	2		
Words	84	Related Dates	
Total Editing Time	422 Minutes	Last Modified	Today, 16:27
Title	How to save as PDF/A file	Created	Today, 09:26
Tags	PDF/A; guides	Last Printed	Today, 16:23
Comments	Add comments		
Template	Normal	Related People	
Status	Add text	Manager	Specify the manager
Categories	Add a category	Author	
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You can then save the document by clicking on: save as > more options. Then select "PDF" from the select as menu and click "options" (fig. 2).

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From the options menu, tick the "PDF/A compliant" box and click "ok." Save (fig. 3).

LaTeX

Install or load the Colorprofiles and Pdfx packages to your TeX editor. You can find them in the LaTeX thesis template folder.

Fill in the file "output.xmpdata" with your thesis metadata. If you are not using Overleaf, rename this file by changing "output" with the name of your thesis TeX file. For example if your thesis TeX file is named thesis.tex, you will rename your xmpdata file as thesis.xmpdata.

Export the file and save. You will obtain a PDF/A-2B file.

Tips and tricks

In order to avoid issues when validating the thesis file, it is advised to only use images in a PDF/A format.

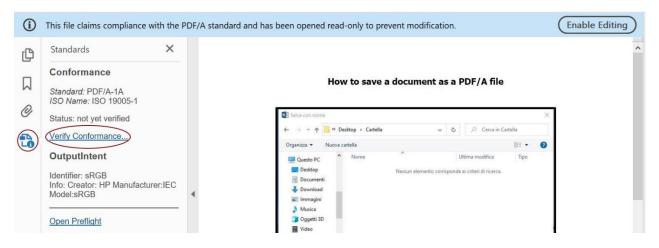
Validate your PDF/A file

In order to verify if your file is truly PDF/A compliant, you must validate it.

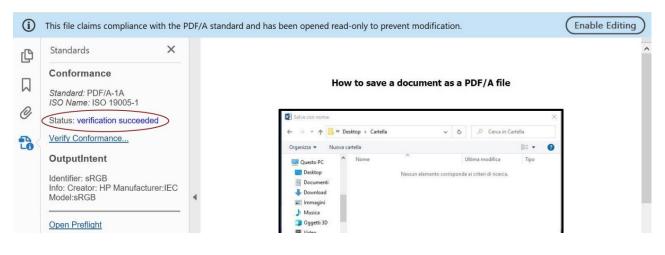
You can do it with **Adobe Pro**. Adobe Pro is a proprietary software and is available by subscription. However, you can use a **7-day free trial** to complete the validation process.

There are also many other options, some of which are open source. You can find some alternatives **here**. **Please avoid online validators which are not listed at the link above, as they are not reliable**.

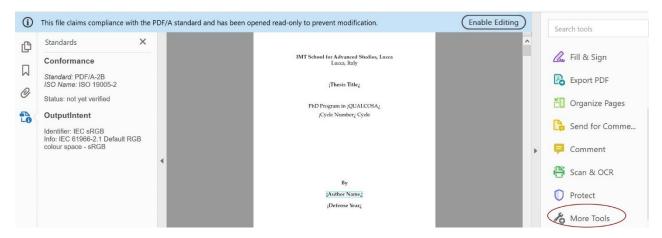
To validate your file, open it with Adobe Pro, click on the "file info" icon on the left, and then on "verify conformance." (fig. 4).



If validation is successful, the file status will update from "not yet verified" to "verification succeded" (fig. 5).



If you do not see a "verify conformance" option on the menu, click on "more tools" on the right (fig. 6).



From the menu, go to the "protect and standardize" section and click "PDF standards." Click on "preflight" (fig. 7).

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Go to the PDF/A section and select the type of PDF/A corresponding to your file (in this case, PDF/A-2b). Click "analyze."

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If no issues are found, a "no problems found" message will appear. Your file has been correctly validated (fig. 9).

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If your file is not PDF/A compliant, you will get an error message (fig. 10).

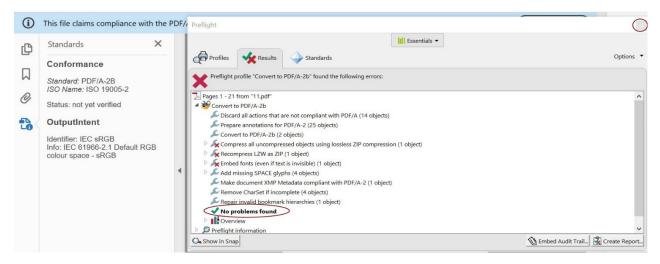
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Please note that files that do not pass validation are not PDF/A compliant. You need to modify your thesis until you obtain a PDF/A compliant file, which is required for your thesis deposit.

You can fix minor errors with Adobe Pro. From the preflight menu, select your PDF/A type and click "analyze and fix" (fig. 11). Save the file.

PDF Standards	Preflight	
(i) This file claims compliance with the PDF	Profiles Results Standards	Options
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Conformance Standard: PDF/A-2B ISO Name: ISO 19005-2 Status: not yet verified OutputIntent Identifier: IEC sRGB Info: IEC 61966-2.1 Default RGB colour space - sRGB	PDF fixups Convert all pages into CMYK images and preserve text information Convert all pages into RGB images and preserve text information Convert fonts to outlines Flatten annotations and form fields Flatten transparency (high resolution) PDF/A PDF/A Convert to PDF/A-1b Convert to PDF/A-2b Convert to PDF/A-1a (Coated FOGRA39) Convert to PDF/X-1a (Coated FOGRA39) Convert to PDF/X-1a (Japan Color 2001 Coated) Further Ontions	Edit

At the end of the procedure, you will obtain a "no problems found" message. Close the app (fig. 12).



Useful links

Overleaf, a TeX online editor to which our School has a subscription.

Bibliography

Niemela, Jarmo. *How to create a PDF/A file with LATEX* (2021), accessed February 14, 2022, https://webpages.tuni.fi/latex/pdfa-guide.pdf.

Selinger, Peter. *Creating high-quality PDF/A documents using LaTeX* (2014), accessed February 17, 2022, https://www.mathstat.dal.ca/~selinger/pdfa/.



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