List of useful links to study Ansys

This list does not contain any links to pirate resources. Surf the web by your own, and you will definitely find most of following items.

> ***Remark:***
> *Ansys, as most of other FEA packages, has two major interfaces: an old one (Classical GUI, now named "Mechanical APDL") and a new one (Workbench, also named "Ansys Mechanical"). Mechanical APDL is not so convenient to use, but is very useful when you want to solve some specific problem which is not ordinary. Mechanical APDL could be driven via text commands, thus it's liked by experienced users. Workbench is more user friendly, and allows the easy usage of the geometry from modern CAD packages, maintaining the associativity through the whole FEA process. However, Workbench has few limitations; it is not as flexible as APDL. In APDL you can program everything you can imagine, for instance you can implement your own finite elements. But* ***for ordinary problems, Workbench is quicker and simpler to use. Workbench is a wise choice to start from, while studying Mechanical APDL could be a next step*** *to considerably improve your level of knowledge. For example, the simple linear buckling problem could be solved within Workbench without APDL, but if you want to solve a comprehensive nonlinear buckling problem, the wisest way is to use Workbench with command codes from APDL. The one another example when APDL is used with Workbench is when you need to make an analysis with submodeling or substructuring techniques. The ability to fluently use APDL commands in Workbench is indeed a distinguishing feature of professionals highly experienced in Ansys.*

All resources listed below could be divided on those which are focused on Mechanical APDL and on Ansys Workbench.

Links useful mostly for beginners

#	Name	Link	Description of the link	Comments
1	Course Documents for Advanced Computer Aided Design	https://web.cimne.upc.edu/users/xmartinez/MAE656/index.html	Set of educational presentations	**Beautiful resource to start with**. Step-by-step presentations covering the very basic topics related to FEA and Ansys Workbench.
2	ANSYS Workbench Tutorial Release 14 by Kent Lawrence	http://www.amazon.com/ANSYS-Workbench-Tutorial-Release-14/dp/1585037540	Very good book. Quite expensive, though.	Tutorials for Release 10 could be found for free in the net. Very basic tutorials, **best to start with**. The only shortcoming is that the project page of Workbench 10 is different from modern Workbench, so it could be difficult to start exercises. I recommend to watch few tutorials on Youtube to understand the modern view of project page, and then you will have no problems with Lawrence's tutorials.
3	Finite Element Simulations with ANSYS Workbench 14 by Huei-Huang Lee	http://myweb.ncku.edu.tw/~hhlee/Myweb_at_NCKU/ANSYS14.html	Lecture slides, animations of results, **finished projects**.	This resource is extremely useful because of finished projects uploaded to the web site. The book itself is available for fee only. The old version of the book (with Wokrbench 12) could be found for free, though
4	Youtube	http://www.youtube.com/	Many people share demo videos	Search for "ansys demo", "ansys tutorial" or simply "ansys". Try to find channels where people upload ansys tutorials, such as feaprofessor's channel.
5	Madenci. The Finite Element Method and Applications in Engineering Using ANSYS. 2006	http://www.springer.com/engineering/mechanical+engineering/book/978-0-387-28289-3	Springer allows to read this book online	Focused on Mechanical APDL. Fundamentals of FEA are covered. **Advanced topics** are presented as well.
6	Official website resource library	http://ansys.com/Resource+Library	Different resources	Lots of advertising information, but you can find educational info as well

Links useful mostly for experienced users

7	Focus Journal	http://www.padtinc.com/blog/	Lots of useful articles	Useful tips and tricks for Ansys users. Very valuable to improve and widen the knowledge of Ansys package, both Workbench and APDL
8	Ansys.net	http://ansys.net/	Lots of reference information	Oriented on APDL users. It is a unique source of undocumented featerus
9	XANSYS	http://www.xansys.org/	Forum	Beautiful forum, guess this is an only place where top-level users share their experience.

Wish you good luck in studying Ansys!