**Learn data science step by step in 6 months**

Following is a schedule to learn data science step by step considering **4 hours** of dedicated, focused study every single day. This program is perfect for beginners with no knowledge of data science and programming.

**Week 1 and 2: Excel and Statistics**

* Excel
  + Google templates gallery for personal finance etc : <https://docs.google.com/spreadsheets/u/0/?ftv=1>
  + Budget planner: <https://www.vertex42.com/ExcelTemplates/budgets.html>
  + Chandoo's youtube channel: <https://www.youtube.com/channel/UC8uU_wruBMHeeRma49dtZKA>
  + Chandoo's website: <https://chandoo.org/>
* Statistics
  + Khan academy: <https://www.khanacademy.org/math/statistics-probability>
  + Khan academy youtube: <https://www.youtube.com/playlist?list=PL1328115D3D8A2566>
  + Statistics by Marin : <https://www.youtube.com/playlist?list=PLqzoL9-eJTNBZDG8jaNuhap1C9q6VHyVa>
  + Statquest youtube channel: <https://www.youtube.com/user/joshstarmer>

**Week 3 and 4: Python**

* Python
  + Codebasics python tutorials (first 16) - <https://www.youtube.com/playlist?list=PLeo1K3hjS3uv5U-Lmlnucd7gqF-3ehIh0>
  + Codebasics python HINDI tutorials (first 16)- <https://www.youtube.com/playlist?list=PLPbgcxheSpE1DJKfdko58_AIZRIT0TjpO>
  + Make sure to work on exercises
* R
  + Marin's lectures: <https://www.youtube.com/playlist?list=PLqzoL9-eJTNBlVXxWvJkq0dtVut2sICUW>

**Week 5, 6, 7, 8: Numpy, Pandas, Data Visualization Libraries**

* NumPy and Pandas
  + Codebasics Numpy playlist: <https://www.youtube.com/playlist?list=PLeo1K3hjS3uset9zIVzJWqplaWBiacTEU>
  + Codebasics pandas playlist (first 9): <https://www.youtube.com/playlist?list=PLeo1K3hjS3uuASpe-1LjfG5f14Bnozjwy>
* Visualization library
  + Matplotlib: codebasics matplotlib playlist: <https://www.youtube.com/playlist?list=PLeo1K3hjS3uu4Lr8_kro2AqaO6CFYgKOl>
  + Seaborn: codebasics seaborn tutorials: <https://www.youtube.com/playlist?list=PLJIOr9Je9wzHT-ptgfelpt2Nyx4VGX_j9>
* Kaggle exploratory data analysis
  + Notebooks: <https://www.kaggle.com/notebooks>
  + Datasets: <https://www.kaggle.com/datasets>

**Week 9, 10, 11, 12: Machine Learning**

* Machine learning
  + codebasics ml playlist (first 16): <https://www.youtube.com/playlist?list=PLeo1K3hjS3uvCeTYTeyfe0-rN5r8zn9rw>
  + data science regression project: same playlist as above. Tutorial 18 to 25
  + HINDI codebasics ml playlist (first 14): <https://www.youtube.com/playlist?list=PLPbgcxheSpE0aBsefANDYe2X_-tyJbBMr>

**Week 13, 14, 15, 16: Deep Learning**

* Deep learning (artificial neural network, convolutional neural network, recurrent neural network)
  + codebasics deep learning playlist: <https://www.youtube.com/playlist?list=PLeo1K3hjS3uu7CxAacxVndI4bE_o3BDtO>

**Week 17, 18, 19, 20: SQL & MongoDB**

* SQL
  + kudavenkat playlist (first 16): <https://www.youtube.com/playlist?list=PL08903FB7ACA1C2FB>
  + khanacademy SQL course: <https://www.khanacademy.org/computing/computer-programming/sql>
* MongoDB
  + <https://www.coursera.org/learn/introduction-mongodb>

**Week 21, 22, 23, 24: BI tools**

* Tableau
  + Codebasics sales insights project: <https://www.youtube.com/playlist?list=PLeo1K3hjS3usDI9XeUgjNZs6VnE0meBrL>
  + HINDI codebasics sales insights project: <https://www.youtube.com/playlist?list=PLPbgcxheSpE2B7YFfOualUTlRhgnQR7Kn>
  + Abhishek Agarwal: <https://www.youtube.com/playlist?list=PL6_D9USWkG1C4raCOTlTf_oq4XnNNNtm9>
  + Bharti consultancy: <https://www.youtube.com/playlist?list=PLyD1XCIRA3gQmN73dHwQWr4R08ABZFMtZ>
* Power BI (project)
  + codebasics sales insights project: <https://www.youtube.com/playlist?list=PLeo1K3hjS3uva8pk1FI3iK9kCOKQdz1I9>
  + personal finance management project: <https://www.youtube.com/watch?v=pqSoCa2NGj4>

**Soft skills**

* Learn anything effectively: <https://www.youtube.com/watch?v=yZFrSDjRvjk>
* Group learning
  + Codebasics discord server: <https://discord.gg/r42Kbuk>
  + Hold each other accountable

**Books and other resources**

* Free book on statistics: <http://greenteapress.com/thinkstats/thinkstats.pdf>
* Another good book on statistics (not free) Naked Statistics - Charles Wheelan