

Data Engineer 5-Months Roadmap

Note: If you give 3-4 Hours dedicated time, daily 5 days in a week then you can become a good Data Analyst who is skilled enough to crack a good package.

Major Skills Required to become a Data Engineer and be Job Ready

1. Python for Data Engineering(2 Months)
2. SQL(1.5 Months)
3. Understanding Big Data(1 Month)
4. Data Visualisation Tool (1 Month)

**These Durations are considered when done in parallel approx 3 months are enough to cover these skills, but you can do it on your pace and take your time to practice the skills more.*

PYTHON

Duration-2 Months

1. Basics of Python -: [15 Minute Python Tutorial For Beginners In Hindi \(Full & Complete Python Crash Course\) \(youtube.com\)](#)
2. Pandas for Data Cleaning -: [\(3132\) Pandas Tutorial \(Data Analysis In Python\) - YouTube](#)
3. Python for Data Engineering -: <https://www.youtube.com/playlist?list=PL50mYnnddulGdrCn8piPy1CJQcrmAOWms>

Note: Now you good to start but i will suggest to do Easy and Medium Questions from Hackerrank so that you can get good at problem solving and has better understanding of list,dictionary and other major concepts



You will grab batches like this that means you are good to go and great at problem solving skills.

Here are some top questions you need to do to get good hands-on and be confident on Python Skills, and the only rule is “DON’T GIVE UP!”

1. [Python If-Else | HackerRank](#)
2. [Loops | HackerRank](#)
3. [Write a function | HackerRank](#)
4. [Validating Email Addresses With a Filter | HackerRank](#)

5. [Lists | HackerRank](#)
6. [Tuples | HackerRank](#)
7. [String Split and Join | HackerRank](#)
8. [Introduction to Sets | HackerRank](#)

Great! You are done with Python and If you did all the problem solving questions, **kudos to you!!!**

SQL

Duration-1.5 Month

You should be very thorough and good at SQL as it will be very important while giving your interviews and working in live environment

1. Basics of SQL :- [SQL - Complete Course in 3 Hours | SQL One Shot using MySQL \(youtube.com\)](#)
2. SQL Crash Course for Data Domain By Me :-
 [SQL IN ONE SHOT FOR DATA DOMAIN 🔥 | PART 1 | INTERVIEW READY SQL ...](#)
3. Optimisation Techniques of SQL :-
<https://www.youtube.com/watch?v=BHwzDmr6d7s&pp=ygUQc3FsIG9wdGltaXNhdGlvbG%3D%3D>
4. Query Optimisation :- <https://www.youtube.com/watch?v=TyHUU05XKMY>

Note: Now you good to start but i will suggest to do Easy and Medium Questions from Hackerrank so that you can get good at problem solving and has better understanding of list, dictionary and other major concepts



You will grab batches like this that means you are good to go and great at problem solving skills.

Here are some top questions you need to do to get good hands-on and be confident on SQL Skills, and the only rule is **"DON'T GIVE UP!"**

1. [Japanese Cities' Attributes | HackerRank](#)
2. [Weather Observation Station 1 | HackerRank](#)
3. [Weather Observation Station 6 | HackerRank](#)
4. [Weather Observation Station 8 | HackerRank](#)
5. [The PADS | HackerRank](#)
6. [Weather Observation Station 18 | HackerRank](#)
7. [The Report | HackerRank](#)

8. [The Report | HackerRank](#)
9. [Top Competitors | HackerRank](#)
10. [Weather Observation Station 20 | HackerRank](#)

Great! You are done with SQL and If you did all the problem solving questions, **kudos to you!!!** Try to solve more questions and be good at SQL as it really important skill for a Data Analyst

Big Data

Duration-1 Month

1. Understanding Big Data -: <https://www.youtube.com/watch?v=bAyrObl7TYE>
2. What is Hadoop -: <https://www.youtube.com/watch?v=aReuLtY0YMI>
3. Hadoop Ecosystem -: <https://www.youtube.com/watch?v=8r7kHT4K1pA>
4. Mapreduce Technique -: <https://www.youtube.com/watch?v=pcTFiU7wKkQ>
5. Mapreduce Working -: <https://www.youtube.com/watch?v=cHGaqz0E7AU>
6. Apache Spark -: <https://www.youtube.com/watch?v=ymtq8yjmD9I>
7. Hadoop V/S Spark -: <https://www.youtube.com/watch?v=jEIMeXcvlBc>
8. Apache Spark Architecture -: https://www.youtube.com/watch?v=F3-8jFI_OPY
9. Pyspark Introduction -: <https://www.youtube.com/watch?v=4HBEajbmDzU>
10. Major Functions and use of Pyspark -: <https://www.youtube.com/playlist?list=PLZoTAELRMXVNjiiawhzZ0afHcPvC8jpcg>

Big Data Questions will definitely be asked to you when you are going for pure Data Engineering Interviews, it can be theoretical and practical as well, mostly companies ask the scenario based questions that i will list in the document further.

CLOUD

Duration-20 Days

Cloud is one of the major skill that is required to be a Skilled Data Engineer with latest DE Skill Trends, so you can pick any cloud as majorily the services of the cloud that are used are the technologies that you have learned so far, just the advantage is as Cloud Services are Serverless so you will be able to scale the applications easily, without worrying about infrastructure.

1. Major Services required in AWS for DE -: <https://youtu.be/eZSADEjm-TM?si=3FAsW8BAIsgElbt7&t=2>
2. AWS Services -: <https://www.youtube.com/playlist?list=PL0IK8ytA0MgjYGvz0hS4w3UPQ1-VV2uX>

**Now in this playlist all type of vides are added but only do the videos till the aws services.*

PROJECT

Duration-15 Days

Firstly Start with Guided Project Tutorial that will help you building that confidence! And make your Resume Strong.

1. Data Engineering Pyspark Project -:
<https://www.youtube.com/playlist?list=PLVdoaEL574VAJH5NM24dFmdxapUy1S0Rg>
2. Data Engineering 5 Free Projects -:
<https://www.youtube.com/playlist?list=PLBJe2dFI4sgvQTNNkl3ETYJgNPR4CBpFd>

JOB SEARCH PROCESS

Now this has to be followed when you are looking for a job, and has acquired the skill, start looking out on LinkedIn.

So, Here are some my Experience Videos that would be helpful to find out the job!

1. Naukri Tested Tricks Playlist -:
https://www.youtube.com/playlist?list=PLVdoaEL574VDytohde1MGMIuSaBvFTNx_
2. LinkedIn Tested Tricks -:
<https://www.youtube.com/playlist?list=PLVdoaEL574VA3vZmANbBhYFq1zXX9yvG0>

Want Personal Guidance??

You can connect me personally over here -: <https://topmate.io/anurag2410/>

Or Follow me on my other social Platforms here -: [Anurag Srivastava | Instagram | Linktree](#)



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