Kiến thức cần học cho các đề tài:

Đề tài 1: blockchain

<https://medium.com/coinmonks/building-a-simple-blockchain-data-structure-with-python-e7ebd448647a>

<https://hackernoon.com/learn-blockchains-by-building-one-117428612f46>

<https://blockgeeks.com/guides/blockchain-developer/>

Đề tài 2: Học về scrapy: công cụ rút trích dữ liệu

<https://www.hocpython.com/blog/scrapy-cong-cu-boc-tach-du-lieu-sieu-manh/>

<https://viblo.asia/p/thu-thap-du-lieu-voi-scrapy-splash-lua-noi-dung-duoc-tao-boi-javascript-3Q75wBbMlWb>

Graph API.

Facebook SDK for python

Đề tài 3, 4: Tìm hiểu về luật kết hợp thông qua thuật toán Apriori

<https://ongxuanhong.wordpress.com/2015/08/23/khai-thac-luat-tap-pho-bien-frequent-itemsets-voi-thuat-toan-apriori/>

<https://github.com/asaini/Apriori>

<https://medium.com/@deepak.r.poojari/apriori-algorithm-in-python-recommendation-engine-5ba89bd1a6da>

4: python: phức tạp

4: c#: dễ

Phuơng pháp rút trích dữ liệu

<https://realpython.com/python-web-scraping-practical-introduction/>

<https://github.com/dbpedia/table-extractor>

https://www.youtube.com/watch?v=ZY\_dcIVEooU

Đề tài 5: Restricted Boltzmann Machines (RBMs)

<https://blog.echen.me/2011/07/18/introduction-to-restricted-boltzmann-machines/>