



Sharing with QFRM

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QFRM/4, WS

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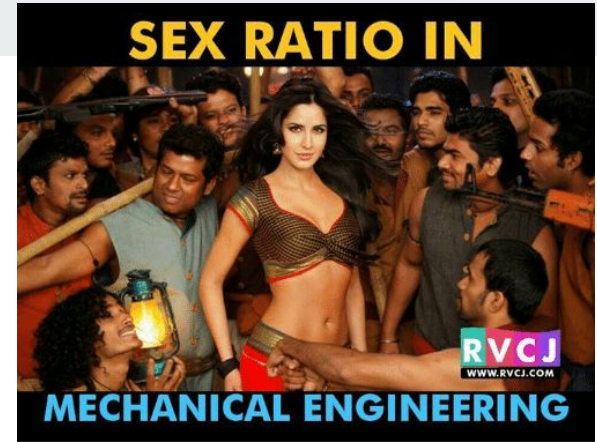
My pre-college background

A guy (yea another guy) who entered this 8:2 major

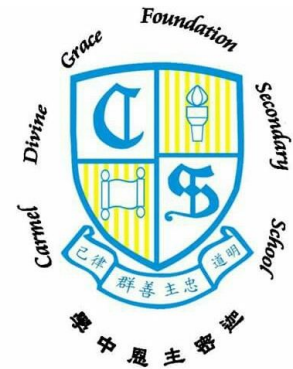
Median admission score from a school in TKO

DSE elective: ECON, ICT, BAFS, M1 (rare combination at that time!)

Knew nothing about quantitative finance and industries



Bechaare Mechanical engineers!



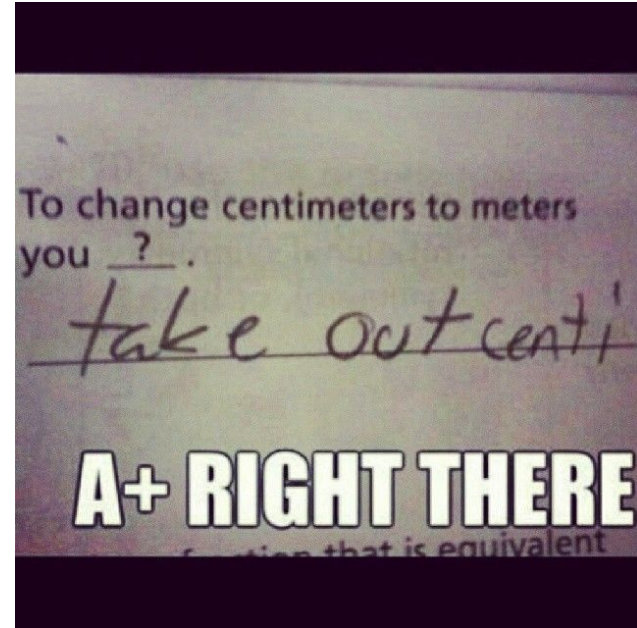
Me vs MATH1010

MATH
Mental Abuse To Humans

When you solved a math
problem 3 times



And Got 3 Different
Answer.



Part I: Overview



What QFRM offers?

Great peers and you can improve yourself

Excellent advisors and facilities

Wide range of opportunity

Fruitful academic study (some very useful in work)

Peer pressure (exists in every major though)

Tough courses (mid-term mean: 5x)

Lost of direction

Low degree of freedom (limited choice of minor without defer)



**A goal without a
plan is just a wish.**

~Antoine de Saint-Exupéry

You need to know:

Entering QFRM does not guarantee a high paying job after graduation

Being a QFRM may get you overqualified for normal jobs

Not all QFRM choose to enter banking industry (rumor: ~50%)

Try to discover your interest ASAP!

Determining your goal

Take courses/do internships -> brief feeling of the field

Attend recruitment talk/career event

Talk to Ada, Prof Chow (focus group), Prof Yam (tea gathering), seniors, peers etc.

Start ASAP!





Part II: Plan



Freshman: explore and enjoy

Not much flexibility with course selection for QFRM

Possible exemption of CHLT/ELTU -> take CSCI15X0 (easy), RMSC2001 (harder if non-M1), UGEX etc.

Join case competition and get some feelings (mark some good teammates)

Possible internship: HSBC apprenticeship, HKEX summer assistant, WAM, small firms (cold email!)

Summer research/semester in CU or foreign school is also good



Sophomore: explore and build CV

Explore different fields with courses/internships (part time inclusive)

Recommendation: STAT2001+2006, FINA3010+3080, RMSC2001 (take after STAT2001 is better for non-M1), electives (explain later)

Prepare for exchange if you want to go in year 3 (higher CGPA/IELTS/TOEFL->more choices)

Try to win/enter final of some case competitions (consider consulting if you enjoy playing them)

Possible internship: HSBC, HKEX, Big 4, Commercial banks, Boutique ibanks, WAM, PWMA etc.

Reach out to Ada once you find your interest and connect with some alumni



Penultimate: explore and fight for offer

People usually go exchange in fall (because only top tier hires in fall and they subsidize your flight)

Recommendation: RMSC4003+4001 (delay if you haven't taken 4003), FINA4110+4120, STAT3007+3008

Prepare to fully devote yourself in job hunting (you will want a good summer intern with potential return offer) -> adjust your course load, leave hard course later if necessary

Possible target: top tier (ibank, consulting, com. bank), hedge fund (if you like quant), HKMA (no return offer), data vendor, private equity, asset manager, conglomerate etc.

Can only play with cards in hand -> prepare yourself with interviews and super days



Final: wrap up and plan again

Great if you receive satisfactory return offer -> enjoy the final year

No return offer -> **defer vs find graduate job directly vs graduate school**

Defer allows you to polish your CV and do more intern (some firms only hire sem intern, which may be a factor of consideration)

It is **easier to return after a good summer intern** rather than enter as a graduate analyst directly

Graduate school is suitable if your target field requires even higher education (foreign school allows you to work out of HK, yet very costly)



Example

Heman

Year 1: Joined China Trade Society, Won Peak Time, Took summer semester

Year 2: Did marketing research for awhile, Finalist in CME Trading, Summer intern at EY risk advisory

Year 3: Exchanged to US, Finalist in JPAWMC, Summer intern at HKMA econ research

Year 4: Practicum with Contrendian (Summer research at CAS, Incoming MPhil at CU)



No other photo at HKMA :/



HEMAN LEUNG ERNST & YONG AND HONG KONG MONETARY AUTHORITY

It is gratifying to be a member of the QFRM family and to participate in this fast-moving, competitive industry.

The previous summer, I worked with Ernst & Young Risk Advisory. Although I felt very nervous before starting this first internship, my supervisor, Wilson, was very friendly and provided a lot of support. As a fellow graduate of QFRM, he gave me a great deal of advice regarding my future development. Therefore, although the statistical work involved was new to me, I was able to quickly learn the skills involved and build on the solid training I had received before.

This summer, I am working with HKMA Economic Research. Coincidentally, my supervisor, Simon, is a graduate of RM. With his guidance, I am exploring the challenging world of econometrics, which requires strong economic sense and quantitative skills. This will be a highly useful experience for me in the future.

My good friends (some from the booklet)

UNIVERSITY OF CALIFORNIA, DAVIS
HARRY SUEN

During my exchange at UC Davis, I experienced a different style of learning and enjoyed travelling in California. One thing that surprised me was the enthusiasm for learning among the students at UC Davis. I used to have the impression that students in the West were more laid back in their studies, but that is not what I observed during my exchange. The students were well prepared for class, made detailed notes and participated very actively in their classes and study groups.



I made use of my free time in the US to travel around, and went to several fascinating country parks such as the Grand Canyon and Yosemite. Although it took a long time to reach these attractions, the views there were so beautiful that it was well worth it.



SHERINE YEOW
CITI PRIVATE BANK

The exposure provided to me by both the Faculties of Business and Science has been unique and invaluable. QFRM equipped me with solid analytical and interpersonal skills, both of which are equally important in the private banking industry. During my internship, the combination of courses in finance and risk management laid a good foundation for me to study the market movements and reactions that affect clients' portfolio performance. I believe that QFRM students receive a distinctive advantage in the workplace by gaining a well-rounded mindset.



SAMUEL CHIU
GOLDMAN SACHS

I joined Goldman Sachs as a controllers intern in the finance division. We work closely with the firm's businesses to ensure that our profitability is accurately measured and reported, whether the reports are for internal management or external investors. My training in QFRM prepared me to understand the basic business aspects of the firm's products and to make sense of the increasingly sophisticated measures applied to safeguard the firm and mitigate risks on our capital. My supervisors gave me the best advice I've ever received, namely to connect with lots of people and be prepared to ask the right questions.

My good friends (some from Whatsapp)





No intern in year 1?

Remark 1

Perfectly fine

Just do not waste your time -> **you need to tell what you did in that summer to interviewers later**

Do summer research with professors if you are interested in further study

Summer semester may reduce your course load in year 3 -> potential courses include MATH2010, UGEX



Exchange in year 3 fall?

Remark 2

Not necessary when I look back (spring is also fine)

But it does take planning -> especially if you target top tier firms

Cost constraint: scholarships (qfin, stat, sci)
-> qfrm has a wider range

Good enhancement to your cv and fun experience to yourself

Take TOEFL earlier if you want to go to Warton



Implicit course prerequisite?

Remark 3

RMSC4001 uses stochastic calculus heavily, so you would not take it before 4003

RMSC2001 uses some introductory probability result, so taking it with/after STAT2001 is better

You can take any FINA at anytime, but 3080 is commonly an official prerequisite

STAT3007 is a relative independent course, so you can take it at anytime (RMSC4005 does not really use its result)



Defer or not?

Remark 4

The best advantage of defer is that **you can claim you are penultimate year again** (most top tier only hire penultimate summer intern) -> another chance of return offer

Other pros include semester intern, enjoy school life etc.

Cons are possible tuition fee, time cost and **you won't know if it would be recession next year**

Relative cost of going to graduate school is lower if there is recession (DSME1030 stuff)




Consideration of internship

Remark 5

Below are some factors (NOT in the order of importance):

- 1) Return rate
- 2) Company culture
- 3) Salary
- 4) Nature of work/department assigned
- 5) Fame of the firm
- 6) Duration



Preparing for interview

Remark 6

Ask your friends/Ada to do mock interview with you

Reach out to different people in career events or on LinkedIn

Prepare for common behavioral questions

Always ask yourself: why you? Why this department? Why this company?

Check our [interview database](#)



Where to exchange?

Remark 7

Depends on your composite score (CGPA if you don't go to interview) and interest

Don't go to interview unless you have very low CGPA

Best finance school: Wharton (U Penn) -> take TOEFL ASAP if you want to go

Some other good schools: Warrick (UK), UCB (US, need luck), UCLA (US, need luck), U of Toronto (Canada)

Part III: Field

Common fields

It can take a whole lecture to talk about different fields that our graduate pursues

In general, there are:

- 1) Banking (investment, commercial, retail etc.) = sell side
- 2) Asset management (PE, hedge fund, VC etc.) = buy side
- 3) Regulatory body
- 4) Data vendor/Tech firm
- 5) Professional service
- 6) Others (conгло, bus driver etc.)





Investment banking


E.g. JP Morgan, Goldman Sachs, BoA Merrill Lynch, Morgan Stanley, UBS, Deutsche Bank, Citi

Arguably the highest paying industry (front office) with undoubtedly high working hour

Front office: IBD (ECM, DCM, M&A), Trading, Structuring, Research (Equity usually), Sales, Asset Management, Private Banking/Wealth Management

Middle office: not our concern

Back office: Finance, Risk, Compliance, Operation



Investment banking

IBD

Related courses: FINA3070 (must take),
4040, 4050 (for M&A) , 4120 (for DCM)

Requirement: presentable (no need to be
very handsome or beautiful though),
sociable, case com experience

Forget about your stochastic stuff -> **you
only need DCF, comparables and multiples**

High pay (bonus from every deal) but high
working hour too



Investment banking

Trading

Related courses: FINA3360 (from my friend), 3340, 4370, 4380, RMSC4001 (VBA skills), CSCI15X0 (if algo trading)

Requirement: detail minded, market sense, careful, some quant skills (always required but I guess don't need a lot)

Rumor said exotic interest/experience helps (like having been a monk before)

High pay, middle working hour (as market will close), occasionally high if market fluctuates a lot

Intern can only do paper trade (need license)



Investment banking

Structuring

Related courses: FINA4110, 4120,
RMSC4001, 4003, 4005, 4007

Requirement: product knowledge, detail minded, careful, stochastic calculus/simulation (if they need to develop model)

Hire very few fresh graduate as most models are not developed in HK -> stochastic calculus may not be necessary though HR is still happy to see you well prepared



Investment banking

Research

Related courses: FINA3070 (for equity), 3080, ACCT4213 (I heard their method is not used in industry), STAT3008, 4005 (for econ), RMSC4002 (for quant)

Requirement: presentable (ER is selling their logic), market sense (ER is essentially doing stock picking), data skills, detail minded

Usually have equity, econ and quant team ->
only ER hire undergraduate in general

Middle pay and middle working hour,
occasionally high when your coverage has
huge changes



Investment banking

Sales, Asset Management, PB

Related courses: FINA3010 (active vs passive), 3080, 4110, 4120, RMSC2001 (know what is VaR)

Requirement: presentable (wealthy, handsome or beautiful is an implicit plus), some product knowledge (depends on the team), sociable

Sales (selling structured product) = AM = PB for most ibank in HK because the modelling was done in US/UK (we noticed this in JPAWMC)

PB has investment, banker and product team (from my friends), yet you don't really need quant skills due to aforementioned reason

Middle pay and standard working hour (sometimes OT on demand of client)



Investment banking

Finance, Risk

Related courses: RMSC2001, 4001 (VBA skills), 4002, DSME2051 (SQL), ACCT (for finance)

Requirement: detail minded, careful, data skills

People inside usually have Big 4 background (audit or advisory) -> some allows you to get CPA (from my friend)

Risk is more quant than finance, and some banks start to deploy machine learning

Good pay (relatively low among all department) but standard working hour usually



Investment banking

Compliance, Operations

Related courses: STAT4001, RMSC4002

Requirement: communication skills, some product knowledge or even none, team player

These two are bridges of many departments and in-house processes

Some banks are investing into AI, so machine learning may be relevant for these two



Commercial and retail banking

E.g. HSBC, Hang Seng, BoC, CCB, Citi

Such bank usually has **corporate banking (target conгло)**, **commercial banking (target large corp or SME)** and **retail banking (target you and me)** department

Corporate/commercial banking can be divided into relation manager (lend money for projects) and trade finance (FX related)

Related courses: FINA3020 (trade finance), 3070, 4120 (loan related), RMSC2001, STAT3008

Risk management is key concept in loan lending, the bank doesn't care if you use quant skill or not



Asset management

E.g. Blackrock (AM), Blackstone (PE), Citadel (hedge fund), Jane Street (prop trade)

AUM varies among institutions -> some offers programme as good as sell side (in terms of training)

Working hour and culture is generally better than sell side at cost of lower salary usually, but pressure is low (work life balance) -> with special requirement on employee though (Jane Street: mental math)

Related courses: FINA3080 (must), others depend on coverage like 3020, 3070, 4110, 4120, RMSC4001 (VBA), STAT3007, 3008 (quan skill), CSC12520 (for hedge fund)

Graduate usually jump to buy side after several years in sell side



Regulatory body

E.g. HKMA, HKEX, SFC

Usually hire undergraduate via MT programme -> intern experience inside is a plus but no definite return offer (my past colleague said HKMA will give priority to candidate with intern experience inside)

Many different departments -> more require market knowledge in general instead of quant skills

Related courses: FINA3010, 3020 (FX), 3070 (Equity), 3080, 4120 (Fixed income), 4050 (M&A), RMSC2001 (risk related department), STAT3008 (basic quant skills), ACCT (reading regulation)

Get to know something about BASEL



Data vendor (rating agency included)

E.g. Bloomberg, Reuters, S&P, Moody's, Nielsen

Usually have data (consolidate data), research (conduct analysis and deliver insight) and sales (promote and sell their service, I will not discuss this) team

Data team seems to hire relatively more people in the era of machine learning

Rumor said Bloomberg wants their process to be more efficient (from my friend)

Related courses: STAT3008, 4001, RMSC4002, FINA4120 (credit rating), CSCI

Requirement: detail minded, research/data skills, careful, team player



Professional service (consulting included)

E.g. Big 4 accounting (audit, tax, advisory), McKinsey, BCG, Bain (MBB)

Core business usually around increasing firm value -> corporate finance related (quant skills is relevant for risk team)

Case com experience is extremely important -> MBB hire very few graduates

Related courses: FINA3070, 4040, 4050 (for deals/M&A), ACCT (for Big 4)

Lower pay than IBD but same working hour (a lot of chance to fly around for MBB)

Requirement: presentable, sociable (for MBB), detail minded

Others

E.g. Swire, Johnson & Johnson, L'Oréal

Requirement varies but you can build your CV around their core business

~~KMB: get a driving license~~

FMCG: MKTG2010, FINA3070 (important), MGNT1020

Property developer:: FINA3060, ACCT2121, case com with focus on property development industry



九巴·龍運 車長招募

全職 \$23,100* 每天工作約10小時

半職 \$13,300* 每天工作約6小時

迎新獎金高達 \$10,000
受條款及細則約束

*平均月入~(包括年尾底薪雙糧)

可自由選擇以下時段:
· 上午6時至中午12時 或
· 下午4時至晚上10時

- ✓ 家屬免費乘搭巴士
- ✓ 安排鄰近車廠上下班
- ✓ 交通意外法律支援
- ✓ 可享有新入職訓練
- ✓ 早晚設員工專車接送
- ✓ 員工優惠站
- ✓ 醫療及住院保險
- ✓ 員工子女獎學金計劃
- ✓ 員工興趣及康樂會

時薪 (\$80/小時) 每星期工作不少於18小時

入職要求: 持有香港駕駛執照 1/1A 滿三年或以上; 或持有香港駕駛執照 10-17

招募熱線：
2786 8708

KMB LWB

9857 0129 KMBrecruitment

Part IV: Academic



Difficulty in terms of content (not exam)

From S to C (S is most difficult):

S: RMSC4005, 4007, 4001 (if you are not good at programming), MATH (analysis related)

A: STAT3000+, RMSC2001 (if you take early), RMSC4000+, FINA4130-4160, CSCI2520

B: FINA4000+, STAT2001, 2006, MATH1010 (attend every class), 1030, RMSC2001 (after STAT2001)

C: Other FINA



How to have a higher CGPA?

Question 1


First thing first, you need to work hard :P

Take easier courses earlier (planning) -> your GPA is almost useless in final year if you have return offer

Take courses with a larger class size -> by LLN, the mean should stabilize which cause easier A range

Seek for resources -> unfortunately I don't have either

In worst case you can report something like major GPA/term GPA on CV



What to take during exchange?

Question 2

People take MATH2010 if possible, but the one in CU is not that difficult. MATH1010 requires proof but 2010 usually does not

Other popular choices are FINA3020, 3070, 4110, STAT3007, 3008, UGEX etc.

Note that your credit transfer process only start when you apply for it



When to take course X?

Question 3

In general,

- 1) Take FINA3010, 3080 ASAP
- 2) Take FINA3210 (easy) at anytime
- 3) Do not take CSCI1580 since VB is not useful and you can't take 2520 after it
- 4) Start to take FINA4110, 4120 after 3080 -> you need to compete with IBBA for the class
- 5) Take STAT3007, 3008 in year 3
- 6) Take RMSC4001 after 4003, so usually year 4 if you go exchange
- 7) Plan for capstone -> you may take RMSC4202 with summer intern
- 8) Consult professors/seniors if you are unsure



Business elective?

Question 4

I think you should take FINA3070 regardless of your interest. It is an interesting course talking about firm value

People usually take FINA3000+, ACCT2121, 4213 or MGNT1020 (with free credit in year 1)



Quantitative Finance elective?

Question 5

People usually take 4110 and 4120 since they are offered regularly by our faculty

4370 seems to hire external lecturer to teach. It is not offered this year

4150 and 4160 are taught by Prof. Chow. Personally I think it is quite interesting but as financial economic courses, prepare them to be completely different from other FINA

QFRM should do fine in this area usually



Risk Management Science elective?

Question 6

RMSC4002/STAT4001 is quite interesting
and machine learning is indeed a trend

RMSC4005 is useful if you want to further
study/work in derivative pricing

STAT4003 is a continuation of 2006 and
teaches you why statistics is a separate field

STAT4005 lies in the field of econometrics
and is used by research/hedge fund

Consider taking more MATH if you want to
go to graduate school



Capstone?

Question 7

FINA4130, 4140 (either one) and 4380 are offered every year. They have less research components

FINA4190 , RMSC4102 requires you to find a supervising professor yourself

FINA4390 is provided subject to external organization's availability. They choose students to work on a project with them

RMSC4202 is a presentation for a risk internship that you have done

FINA6000+ are PhD level courses