

Young Mathematicians For Hire!

Internship and Career Guidance For Mathematics Undergraduates

<http://science.utm.my/ymfh/>

FACULTY OF SCIENCE ROADMAP

Department of Mathematical Sciences
Faculty of Science

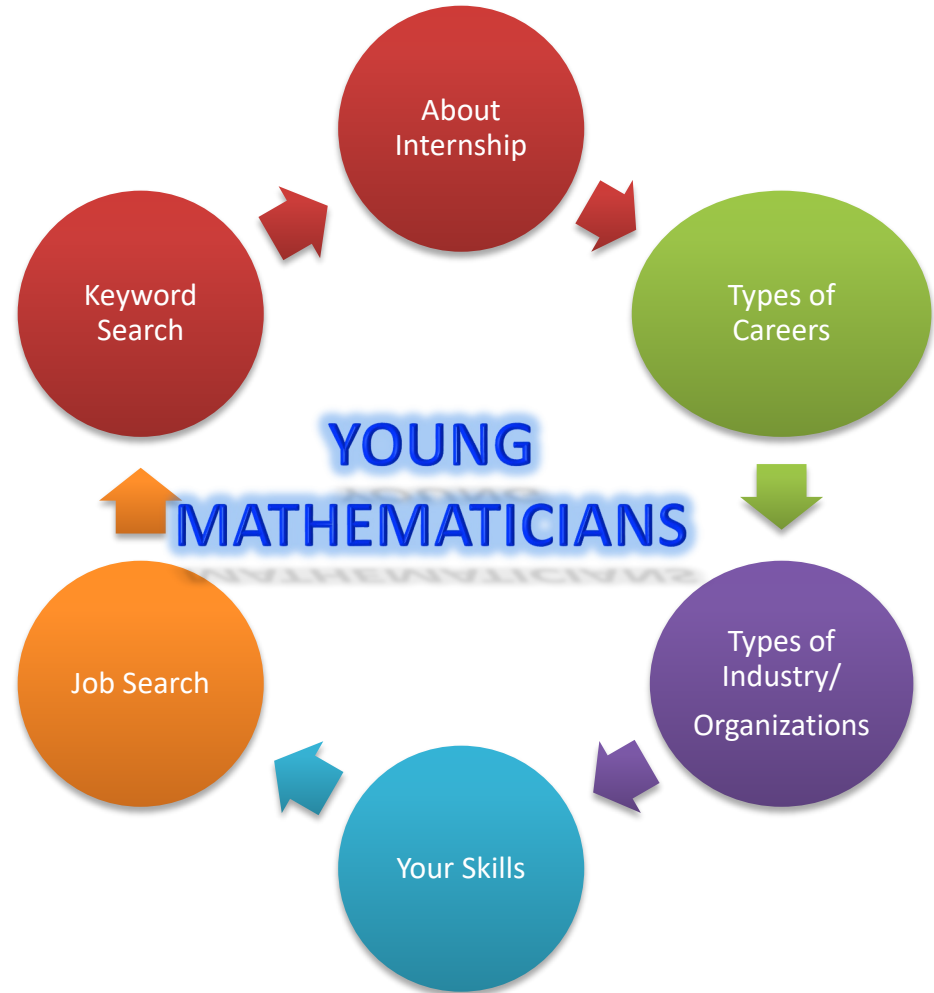
Prepared by: Dr. Norhaiza Ahmad . 16 March 2021
<http://science.utm.my/norhaiza/>

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Outline

1. About Internship
2. Careers for Mathematicians (in Malaysia)
3. Types of Industry/Organizations for Internship
4. What can you offer: Your current Skills
5. Job-search
6. Effective keyword search



1. Research- always research about the companies that you are applying for

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About Internship

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What is an internship?

- position of a **student** or trainee who **works in an organization**, **sometimes without pay**, in order to **gain work experience** or **satisfy requirements** for a qualification.
- typically lasts between two weeks and three months.



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Internship Related Phase



Three-Phases



Applying for internship

Internship

Life-after Internship



This talk
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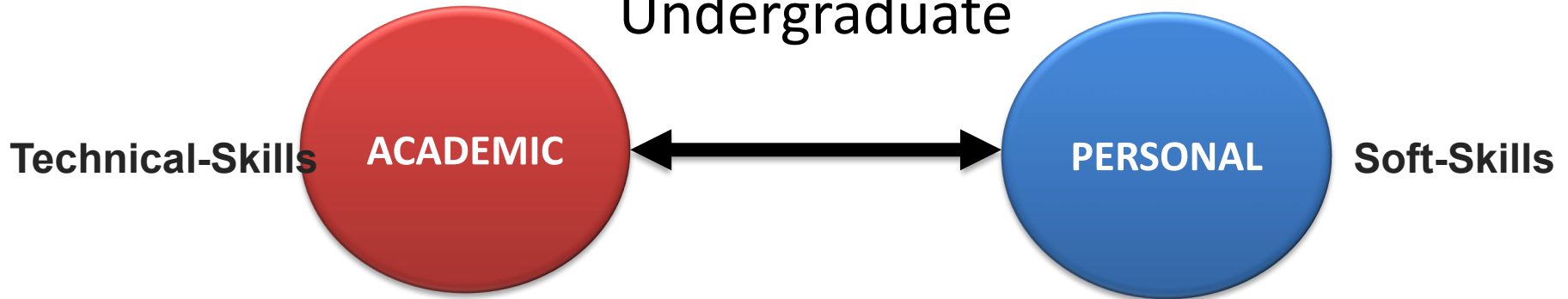




Why do you need an Internship?

Part requirement to BSc (Mathematics) & BSc (Industrial Mathematics)

Benefits for Undergraduate Undergraduate



- Degree requirement
- Hands-On Experience
- Apply classroom learning in a professional environments
- Develop Marketable skills

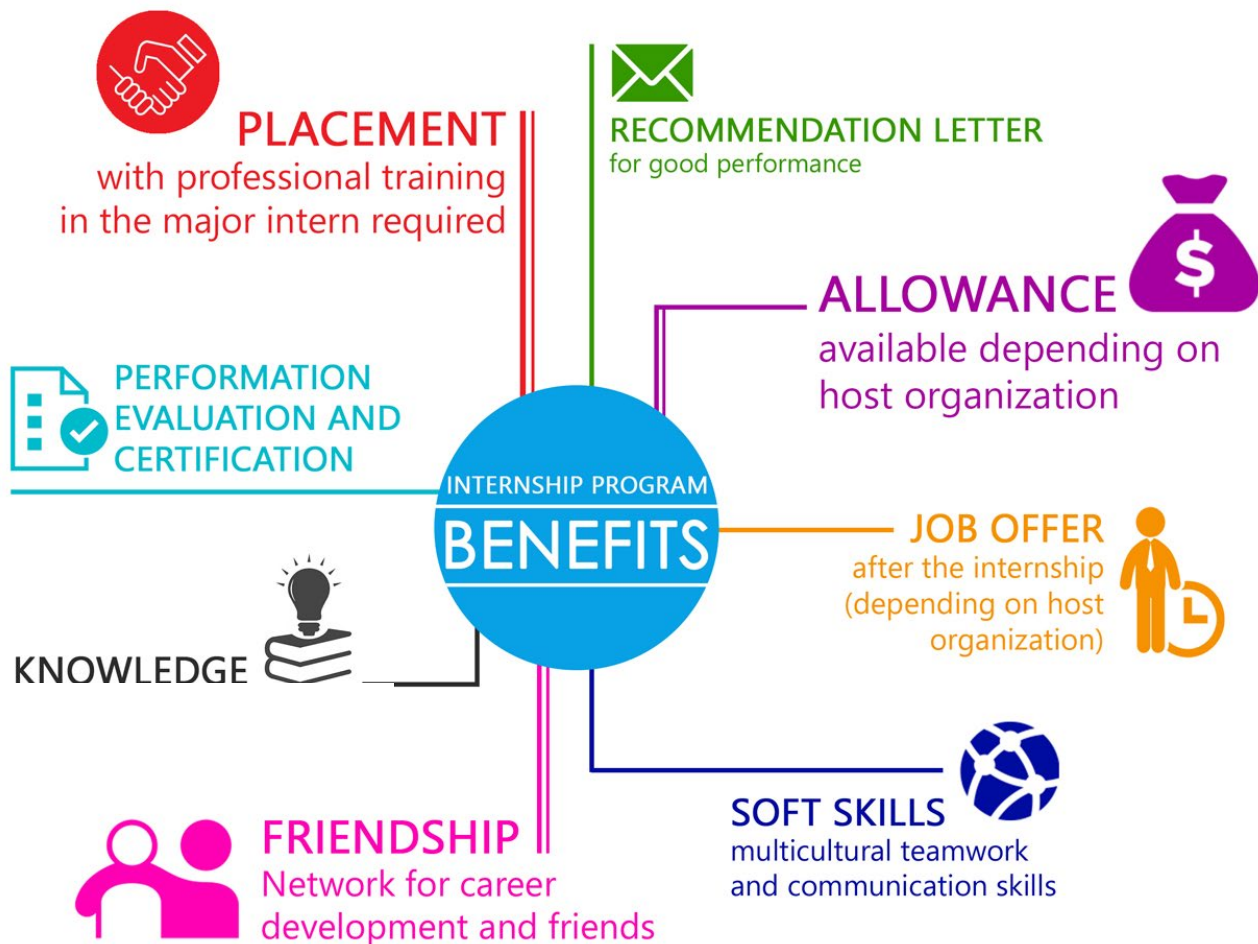
- Networking
- Boost Confidence
- Explore Career Path
- Improve Communications Skills
- Time Management
- Improve Resume

Students gain and improve Technical Skills and Soft Skills

Employment-ready when you graduate

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Why do employers need interns?

Perks & Benefits for Employers

- select and train interns-- they're looking for a **return on their investment**.
- Check out & Evaluate potential candidates
- Expose young professionals to their **brand**
- Learn from students' **fresh perspectives**





Benefits from Internship



- Satisfy degree requirement
- Hands-On Experience
- Apply Course-Work
- Develop Marketable skills
- Networking
- Boost Confidence
- Explore Career Path
- Improve Communications Skills

- Check out potential candidates
- Get rewards – no hiring commitment
- Identify work-force ready graduates
- Attract future employees



Careers for Mathematicians



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What Jobs Involve Math?

- Not limited
 - Almost every job involves math to some extent.
 - The type of math used in jobs can vary from basic addition and subtraction to complex algebra and inferential statistics.
 - range from managerial to technical
- ➔ either way - end of internship tenure- gain experience

Try to Aim: apply internships that **directly** require applications of mathematics



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What Jobs Involve Math ?

in Malaysia

- Researcher
- Quality Control Officer - Production Planner -Production Controller – Procurement Officer – Purchasing Officer
- Scheduling Planner
- Banker
- Actuary
- Human Resource Officer
- Data Survey – Market Data Analyst
- Data Analyst – Digital Analyst – Insight Analyst

RECENT

Use ↑ Keywords
→ Search



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Types of Internships for you

- SSCM: Latihan Industri – numerically inclined & research based
- SSCE: Latihan Penyelidikan- research based interns

Possible to slightly overlap!

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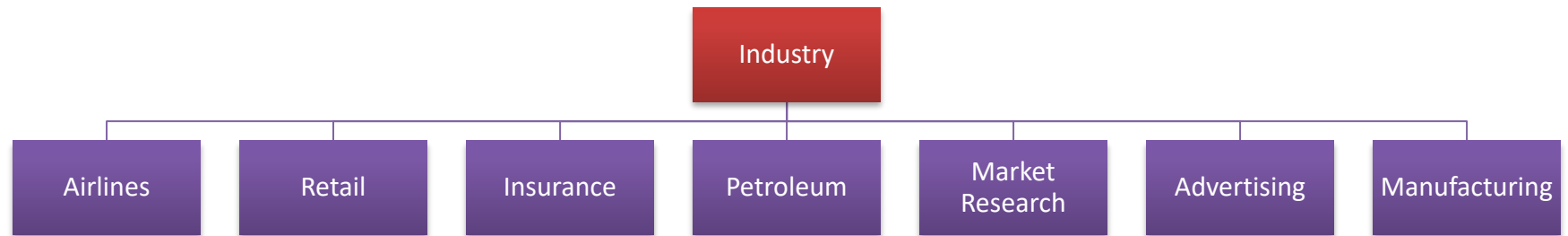
Types of Organizations/Industries



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Types of Industry



Airport Malaysia
Malindo
Air Asia

Shopee
Lazada

AIG
Zurich
Etiqua

Petronas- switch

Various Factories

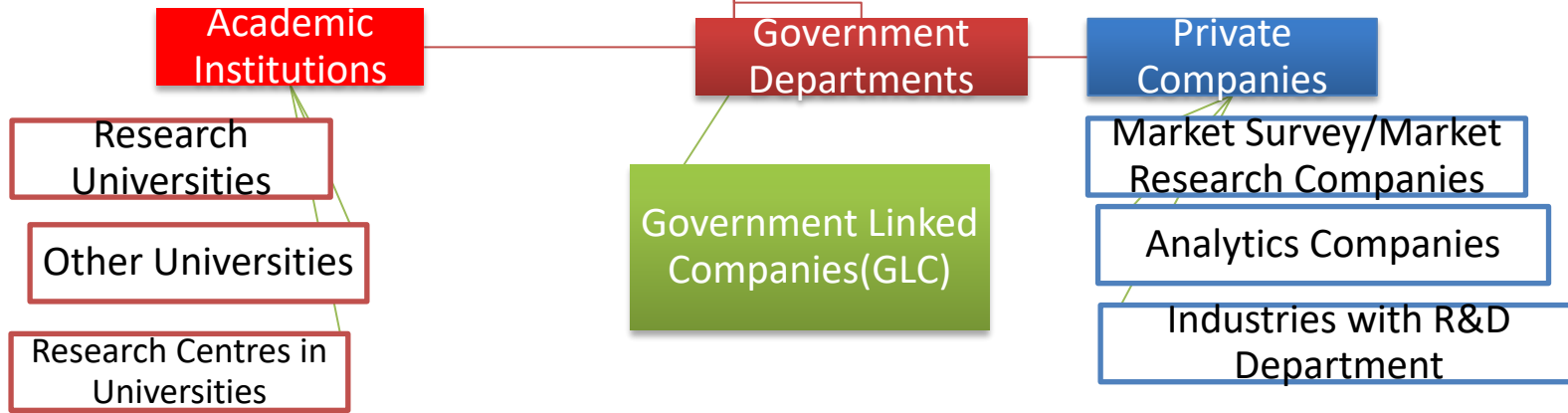
New Opportunities: companies that use data/information eg. customer info to make profit



Other Organizations



Organizations



- Search for Research Centre /Pusat Penyelidikan – at each uni
- Webcrawl Staff Directory
- Does not have to be Department of Mathematics

- Jabatan Veterinar
- Jabatan Meterologi
- Jabatan Perairan
- Pejabat Daerah
- Political Parties
- Pejabat Pilihanraya
- etc

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Table 1. GLCs in the GLC Transformation Programme

Company Name	Market Cap RM bil (as of 10 Oct 2017)	Assets RM bil (as of 2016)	Revenue RM bil (TTM)	Net income RM bil (TTM)	Employment (Approx)	Industry	Top Government Shareholders (Most recent data available)
Affin Holdings Berhad	5.03	68.89	2.55	0.58	4,680	Banks	Lembaga Tabung Angkatan Tentera (35.42%)
Axiata Group Berhad	47.87	70.49	23.19	0.59	25,000	Mobile Telecomms	Permodalan Nasional Bhd. (15.55%) Kumpulan Wang Persaraan (2.67%) Lembaga Tabung Haji (1.86%)
BIMB Holdings Berhad	7.12	63.15	2.61	0.57	3,000	Banks	Lembaga Tabung Haji (51.94%) Permodalan Nasional Bhd. (6.59%) Kumpulan Wang Persaraan (5.29%)
Bousted Holdings Berhad	6.12	17.93	9.21	0.23	17,670	General Retailers	Lembaga Tabung Angkatan Tentera (61.35%) Kumpulan Wang Persaraan (9.11%)
Chemical Company Of Malaysia Berhad	0.63	1.69	0.72	0.14	1,600	Chemicals	Lembaga Tabung Haji (4.99%) Kumpulan Wang Persaraan (0.43%)
CIMB Group Holdings Berhad	56.85	485.77	19.35	4.16	38,950	Banks	Permodalan Nasional Bhd. (9.17%) Kumpulan Wang Persaraan (6.09%)
Malayan Banking Berhad - Maybank	101.09	735.96	21.42	7.52	43,980	Banks	Permodalan Nasional Bhd. (34.51%) Kumpulan Wang Persaraan (3.10%)
Malaysia Airline System Berhad	--	--	--	--	--		--
Malaysia Airports Holdings Berhad	13.72	21.29	4.35	0.12	9,550	Industrial Transportation	Permodalan Nasional Bhd. (17.65%) Lembaga Tabung Angkatan Tentera (1.02%)
Malaysia Building Society	6.75	43.27	1.68	0.30	1,350	Financial Services	Kumpulan Wang Persaraan (0.46%)
Malaysian Resources Corporation Berhad	3.99	7.51	2.86	0.25	1,770	Construction and Materials	Lembaga Tabung Haji (7.51%)
Sime Darby Berhad	61.55	67.68	31.09	0.55	101,820	General Industrials	Permodalan Nasional Bhd. (44.60%) Kumpulan Wang Persaraan (5.73%)
Telekom Malaysia Berhad	23.37	25.00	12.10	0.76	28,050	Fixed Line Telecomms	Permodalan Nasional Bhd. (20.43%) Kumpulan Wang Persaraan (4.10%)

Company Name	Market Cap RM bil (as of 10 Oct 2017)	Assets RM bil (as of 2016)	Revenue RM bil (TTM)	Net income RM bil (TTM)	Employment (Approx)	Industry	Top Government Shareholders (Most recent data available)
Tenaga Nasional Berhad	80.58	132.90	46.19	6.95	35,680	Electricity	Permodalan Nasional Bhd. (11.08%) Kumpulan Wang Persaraan (5.42%) Lembaga Tabung Haji (1.83%)
TH Plantations Berhad	0.98	3.61	0.66	0.17	--	Food Producers	Lembaga Tabung Haji (73.83%) Kumpulan Wang Persaraan (1.15%)
UEM Sunrise Berhad	4.99	13.52	2.49	0.25	1,420	Real Estate Investment and Services	Lembaga Tabung Haji (6.88%)
UMW Holdings Berhad	6.48	16.26	11.43	-1.64	10,000	Automobiles and Parts	Permodalan Nasional Bhd. (40.77%) Kumpulan Wang Persaraan (8.25%)

Notes: TTM - Trailing Twelve Months. Data unavailable for the Malaysia Airlines

Sources: FinancialTimes Markets Data, compiled 11 Oct 2017. Market capitalization data for Malaysia Building Society and Sime Darby from Google Finance.

Note:

- Some companies specify requirement degrees in Mathematics
- Others state equivalent degrees
- Others state any degree
- Others state skills required



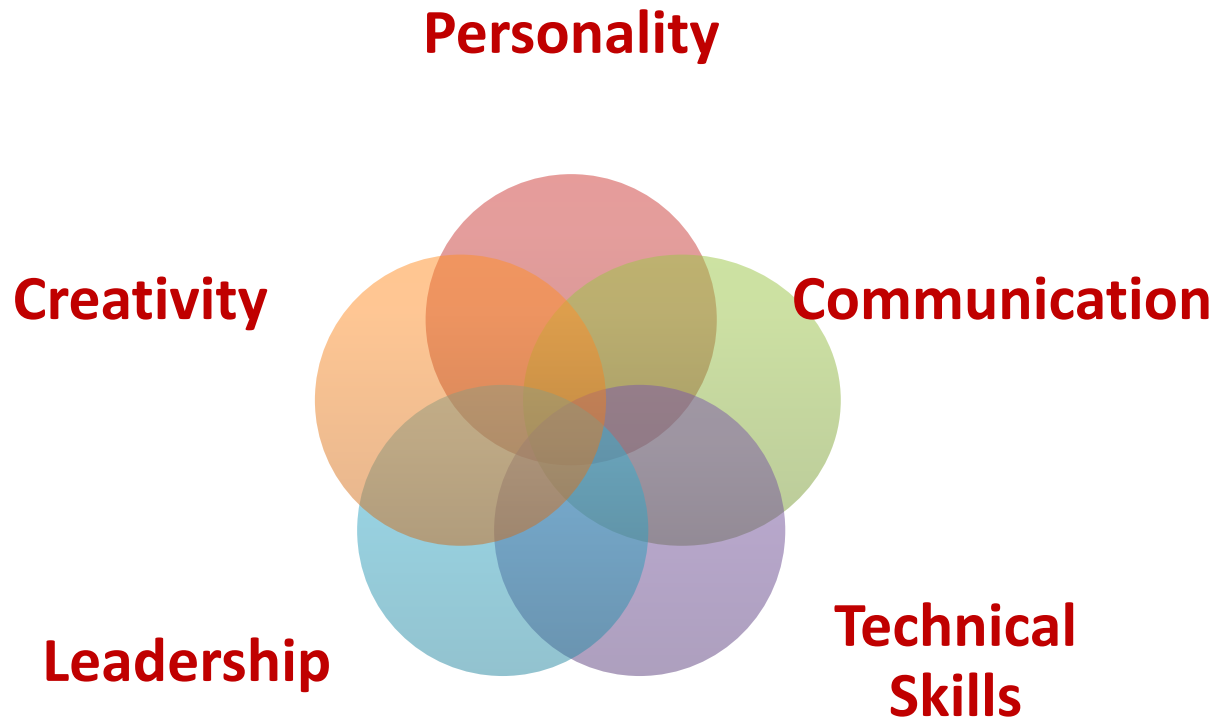


Your Skills



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Traits Needed in Any Organization



You need to demonstrate transferable skills- reliability, punctuality, teamwork

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Essential Employability Skills

Skills employers look out for



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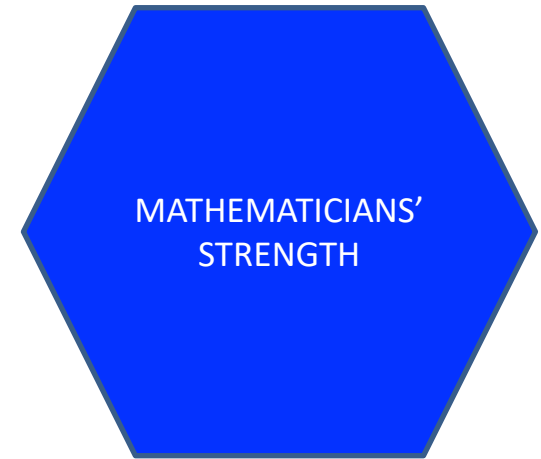


Why should a company hire a mathematician?

Generic Skills for Mathematicians

What skills do studying mathematics develop?

- analytical thinking
- quantitative reasoning
- critical thinking
- problem solving
- ability to manipulate precise and intricate ideas
- construct logical arguments and expose illogical arguments



Analytics – Quantitative - Problem Solving – Numeracy - Model

Important to have other skills as well eg. web, photoshop
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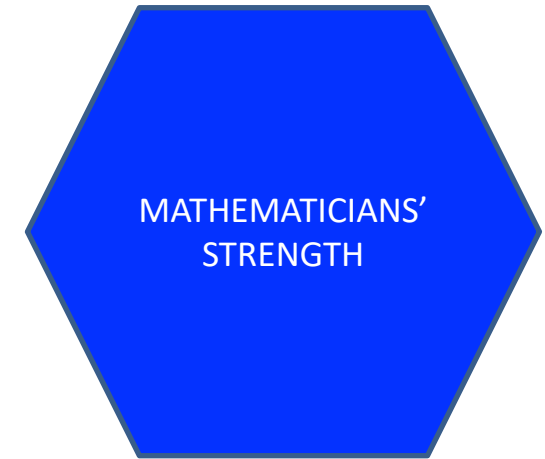




Why should a company hire a mathematician?

Computing Skills

- Microsoft Excel (most adverts require this)
- Other Microsoft Office (Power point)
- Statistical softwares: R, SPSS, C
- C++



Important to have other skills as well eg. web, photoshop



Job/Internship Search

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Methods- find internships

	Internet	Cable/Network	Others
<ul style="list-style-type: none"> • Effective Keywords 	Web Crawl Search	Alumni List	Walk-In
<ul style="list-style-type: none"> • Jobstreet • Indeed • Glassdoor • LinkedIn 	Web Directory Search	Friends & Family	
<ul style="list-style-type: none"> • Internship Programs eg. Maybank • Unilever • Khazanah 	Specific Company Search	Career Fair	



Internship Mindset

Proactive

Sharpen
Skills

If company does not offer internship programs – tell them what you can do – explain skills .

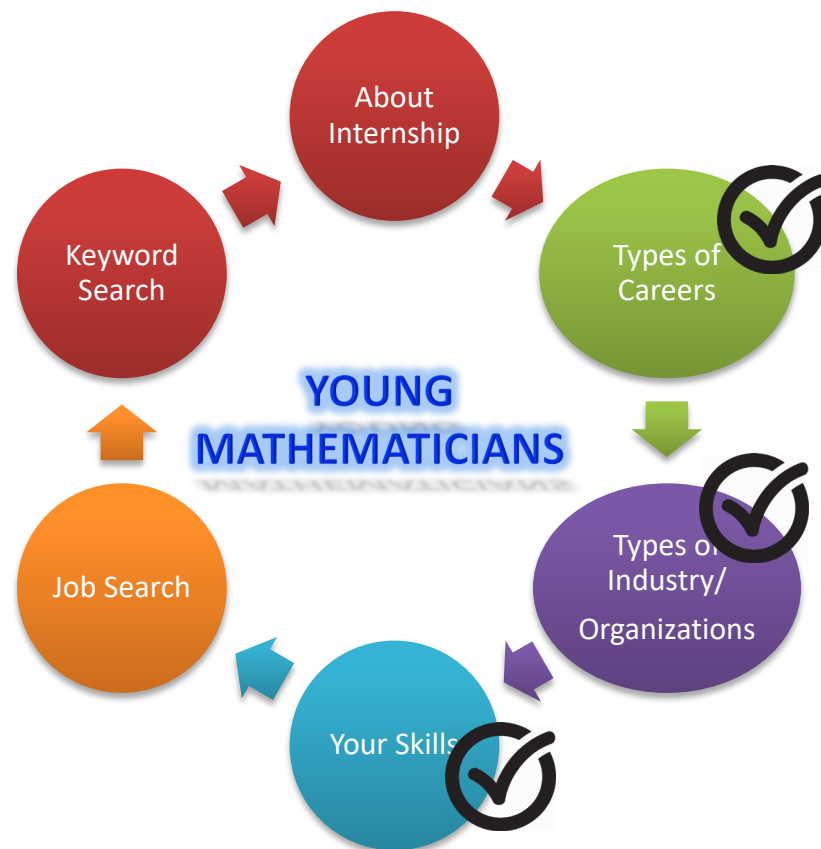
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Effective Keyword Search

- Aim to get hits on search
- Need the closest information for feeder to keyword search

→ Use related information gathered earlier

- types of jobs
- types of industries/organizations
- Name specific industry/organizations
- use specific skills
- Use base word
eg. bank instead of banking





Eg. Keywords Search

① Internship mathematics malaysia change to different states

② Internship mathematics johor penang

③ Internship mathematics malaysia Bank Insurance Retail

④ ADD name of industry (use base word)

⑤ ADD specific name of company (in the industry)
Air Asia Astro SAJ

⑥ ADD technical skills related to mathematicians
Use adverbs used in adverts with mathematics degree

analytics quantitative

⑦ ADD different types of jobs
data analyst researcher market research

⑧ ADD specific skills
R Excel SPSS

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Demo

- LinkedIn
- FB Data Science

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google intern - mathematics - malaysia

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Internship Mathematics Jobs in Malaysia | Careerjet.com.my

<https://www.careerjet.com.my/internship-mathematics-jobs.html>

Jobs 1 - 20 of 44 - All **Internship Mathematics** jobs in **Malaysia** on Careerjet.com.my, the search engine for jobs in **Malaysia**.

Mathematics Jobs for Part Time, Internship, Students and Fresh ...

<https://www.jobstreet.com.my/en/job-search/.../mathematics-jobs/>

New **Mathematics** Jobs for Part Time, **Internship**, Students and Fresh Graduates in **Malaysia** on JobStreet Campus available today. Quality Candidates, Quality ...

Mathematics Internship Jobs in Malaysia - Latest Mathematics ...

<https://www.monster.com.my/mathematics-internship-jobs-in-malaysia.html>

Mathematics Internship Jobs in Malaysia - Apply to 2 **Mathematics Internship Jobs** on Monster.com.my, **Malaysia's** best job portal. Register and upload your ...

Statistics Intern Jobs in Malaysia | Glassdoor

https://www.glassdoor.com/.../malaysia-statistics-intern-jobs-SRCH_IL.0.8_IN170_KO...

Search **Statistics Intern** jobs in **Malaysia** with company ratings & salaries. 13 open ... quantitative field, **maths**, computer science, Physics or business statistics ...

Mathematics Internships in Kuala Lumpur (1 open now ...

<https://my.gradconnection.com/internships/mathematics/kuala-lumpur/>

There are 1 **mathematics internships** in Kuala Lumpur open for applications right now! Research these as well as over 4 employers who regularly have ...

Internship for Economic / Mathematics / Finance iMAXX Services

Subang Jaya, Selangor

must possess or currently pursuing a Diploma or Bachelor's Degree in **Mathematics**, Statistic, Business...
November 8 - [Save](#) - [Send to a friend](#)

Internship for Computing Mathematics FutureSchool

Cyberjaya, Selangor

Job Responsibility Have to finish the job on time Punctuality Speak to customers and communicate their issues to the management Manage accounts and provide a summary to your ...
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Internship for Accounting / Mathematics Students

Kelana Jaya, Selangor

/ Accountancy/ Banking, **Mathematics** or equivalent » No work practice required. » candidates... must be willing to work in Plaza Glomac in Kelana Jaya » 2 **Internship** position(s) for duration 3 - 5...
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Internship for Accounting / Mathematics Students

Kelana Jaya, Selangor

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Internship for Accounting / Mathematics Students

Kelana Jaya, Selangor

/ Accountancy/ Banking, **Mathematics** or equivalent » No work practice required. » candidates... must be willing to work in Plaza Glomac in Kelana Jaya » 2 **Internship** position(s) for duration 3 - 5...
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Internship for Business Studies / Administration / Management

iMAXX Merchandising

Subang Jaya, Selangor

must possess or currently pursuing a Diploma or Bachelor's Degree in **Mathematics**, Statistic, Business...
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Internship for Application Support Analyst

Web Sites Solutions



SKILLS



internship - mathematics - R - Excel - malaysia



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Actuarial / Statistics Jobs for Part Time, Internship, Students and Fresh ...

<https://www.jobstreet.com.my/en/job-search/campus/actuarial-science-statistics-jobs/>

Corporate Insights Analyst Intern ... Skills: Microsoft Office, Microsoft Excel, PowerPoint, Analytics, Statistics, Presentation ... The Nielsen Company (Malaysia) Sdn Bhd ... Review, develop, and enhance Perl, C++, and R codes ... pursuing a Bachelor's Degree in Mathematics, Science & Technology, BioTechnology, Food ...

Internship for statistics Jobs in Malaysia, Job Vacancies - JobStreet.com

<https://www.jobstreet.com.my/en/job.../internship-for-statistics-jobs/>

New Internship for statistics Jobs in Malaysia available today on JobStreet - Quality ... Dell Global Business Center Sdn Bhd. Penang ... Robert Bosch Sdn Bhd.

Internship for actuarial science Jobs in Malaysia, Job Vacancies ...

<https://www.jobstreet.com.my/.../internship-for-actuarial-science-jo...>

New Internship for actuarial science Jobs in Malaysia available today on JobStreet - Quality Candidates, Quality Employers, 27423 vacancies.

Statistics Intern Jobs in Malaysia | Glassdoor

https://www.glassdoor.com/.../malaysia-statistics-intern-jobs-SRCH_IL0,8_IN170_KO...

Search Statistics Intern jobs in Malaysia with company ratings & salaries. 13 open ... quantitative field, ...

jobstreet.com.my

Enter job title, company name, skill, etc All Locations Actuarial/Statistics Fresh Graduates Search

Search Entire Job Ad Job Title Company Name

16 Actuarial/Statistics Fresh Grads/Students jobs

View: Detailed Column Sort: Date

Corporate Insights Analyst Intern Wisesight Malaysia - Petaling Jaya (Selangor) - Seksyen 51A	Login to view salary	14 Nov 2:45 pm
Requirements: - Proficient in Microsoft Office (Words, Excel, PowerPoint). - Good communications skill. - Adequate writing / report writing capability. - Familiar with Social Media... Skills: Microsoft Office, Microsoft Excel, PowerPoint, Analytics, Statistics, Presentation		
Actuarial/Statistics Industry: Engineering / Technical Consulting		
Data Processing Specialist (Statistical Operations) - Mandarin... The Nielsen Company (Malaysia) Sdn Bhd - Selangor - Bandar Sunway	Login to view salary 1 yr exp	13 Nov 2:50 pm
The Data Processing Specialist - Statistical Operations (StatOps) mainly deals with maintaining the samples and universe of stores, setting up and maintaining statistical... Skills: statistical analysis, Statistical Data Analysis, Python, Oracle, SQL		
Actuarial/Statistics Industry: Business / Mgmt Consulting		
Data VBA Officer Emerging Markets Economic Data Ltd - Penang - Gurney	Login to view salary 1 yr exp	09 Nov 2:48 pm
Improve efficiency of data input and operation by writing macros. Update and maintain existing databases. Research to add useful economic and financial data to existing and new... Skills: MS Excel, VBA, independent and mature, proficient in english putonghua a plus, detailed minded and self motivated, good with numbers		
Actuarial/Statistics Industry: R&D		
Statistical Operations Executive The Nielsen Company (Malaysia) Sdn Bhd - Selangor - Petaling Jaya	Login to view salary 1 yr exp	08 Nov 4:51 pm
The Statistical Operations Analyst (StatOps) mainly deals with maintaining the samples and universe of stores, setting up and maintaining statistical expansion, estimating... Skills: statistical analysis, Statistical Data Analysis, Python, Oracle, SQL		
Actuarial/Statistics Industry: Business / Mgmt Consulting		
Data Analytics Internship Moving Walls Sdn Bhd - Kuala Lumpur - Bukit Jalil	Login to view salary	05 Nov 11:18 am
Assisting Data Analysts with their reports via conducting manual surveys on site to validate data		



internship - mathematics - bank - malaysia

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[Internship Mathematics Jobs in Malaysia | Careerjet.com.my](https://www.careerjet.com.my/internship-mathematics-jobs.html)

<https://www.careerjet.com.my/internship-mathematics-jobs.html>

Jobs 1 - 20 of 44 - or Bachelor's Degree in Finance/Accountancy/Banking, **Mathema**
No work experience... required. Applicants must be willing ...

[Mathematics Jobs for Part Time, Internship, Students ... - Job](https://www.jobstreet.com.my/en/job-search/.../mathematics-jobs/)

<https://www.jobstreet.com.my/en/job-search/.../mathematics-jobs/>

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[Mathematics Jobs for Part Time, Internship, Students ... - Job](https://www.jobstreet.com.my/en/job-search/.../mathematics-jobs/3/)

<https://www.jobstreet.com.my/en/job-search/.../mathematics-jobs/3/>

New **Mathematics** Jobs for Part Time, **Internship**, Students and Fresh Graduates in JobStreet Campus available today. Quality Candidates, Quality ...
Missing: bank | Must include: **bank**

[Internship | Maybank](https://www.maybank.com/en/careers/students/internship.page)

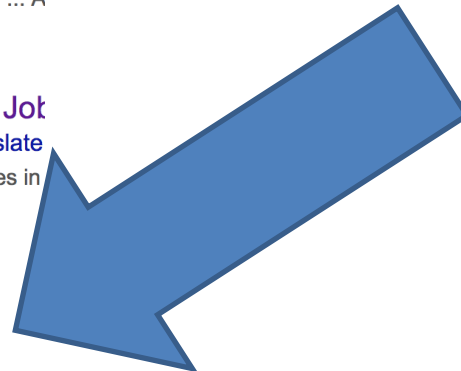
<https://www.maybank.com/en/careers/students/internship.page>

The Maybank **Internship** Programme aims to provide opportunities to talented ... on- attachments with the largest financial services provider in **Malaysia**.

[Mathematics Internship Jobs in Malaysia - Latest Mathematic](https://www.monster.com.my/mathematics-internship-jobs-in-malaysia.html)

<https://www.monster.com.my/mathematics-internship-jobs-in-malaysia.html>

Mathematics Internship Jobs in Malaysia - Apply to 2 **Mathematics Internship Job**





Industry – related search



Google

internship - mathematics - cimb



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CIMB Group - Internship Opportunities

<https://www.cimb.com/en/careers/graduates-interns/.../internship-opportunities.html> ▾

Internship Opportunities. Starting with an orientation on our company culture, you will learn more about the inner workings of banking - alongside leaders of our ...

Missing: ~~mathematics~~ | Must include: [mathematics](#)

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Working at CIMB

Graduates & Interns

Graduate Development

Experienced Professionals

Internship Opportunities

Starting with an orientation on our company culture, you will learn more about the inner workings of banking - alongside leaders of our industry. We also organise regular networking and training sessions to make your experience one of true learning and also a memorable one.

Our best interns are offered full-time positions upon their graduation.

Requirements

- First, second or penultimate year students across all degree backgrounds
- Able to intern for a minimum of two months up to six months
- Strong academic results - minimum CGPA of 3.0
- Active in extracurricular activities including sports
- Strong desire to learn and succeed
- High energy and versatile
- Good interpersonal skills, able to communicate effectively
- Work well, both independently and as a team player
- Placements of non-residents or non-citizens are subject to regulatory approvals.

Intake

All year round.

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Summary

Internships connect employers with the community and university



Big or Small Organisation?

Big companies:

- Internship programs
- You are just one of the many interns in the program

Small companies:

- brush shoulders with important people in the organisation
- find opportunities to use your knowledge in class to practice on

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