

Industry talk about..

PETRONAS DIGITAL YGP

PETRONAS has been looking to expand their scope into the digital field with PETRONAS Digital. PETRONAS Digital aims to foster new talents through their **Young Graduate Program (YGP)**.

EXECUTIVE SUMMARY

PETRONAS reinforces its focus on digital innovation and talent development through the **Young Graduate Program (YGP)** under PETRONAS Digital. This programme is designed to prepare the next generation of professionals in high-demand fields such as **Software Engineering, Data Engineering, and Data Science**. This talk also dives into the daily lives of the aforementioned professionals as well as the work they do at PETRONAS.

Software Engineer

- Why?

More software engineers are required nowadays due to the expanding in cloud computing and big data caused by new technologies. It's one of the highest paid profession compared to other career.

- What?

"Software engineering is the branch of computer science that deals with the design, development, testing, and maintenance of software applications." (Michigan Technological University, 2023) Software engineers need to understand the fundamentals of hardware, software, frameworks, networking, programming, databases, servers and other technologies.

- Skills

Problem-solving skills, programming and coding, analytical and critical thinking, productivity, communication skills, life-long learning, profession in Software Development Life-Cycle (SDLC).



Pratim, (2020, May 28). Software development life-cycle (SDLC) | Arkbauer. Arkbauer. <https://arkbauer.com/blog/software-development-life-cycle-sdlc/>

Requirement

- Malaysian citizen
- Bachelor Degree holder with minimum CGPA of 3.0 or Second Class Upper or Equivalent
- Fresh graduates with less than 2 years working experiences

Merits

- Gain expertise in the related fields.
- Accelerate career growth with hands-on experience.
- Learn from experts and build a professional network.
- Chance to work on projects with real digital challenges.



Data Engineer

- What?

"Data engineering is the practice of designing and building systems for collecting, storing, and analyzing data at scale." (Staff, 2024)

- PETRONAS Enterprise Data Hub ingest data across different source s and is designed with core capabilities to further curate and transform the data to enable various use cases.

- Roles

Extract, analyze, interpret and identify pattern in data from various sources, develop and build data pipeline that work with large data sets, turn data into critical information or translate business needs into data models, perform data validity, accuracy and integrity test.

- How do PETRONAS DIGITAL make Data Engineer ready for future?

On-job assignment, skill assessments, self-paced online learning, instructor-led trainings and certifications

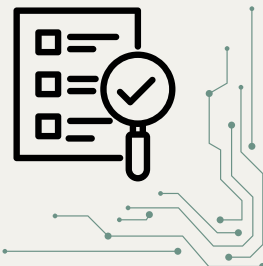
Data Scientist

- What?

Data science is the study of data to extract meaningful insights for business. It is a multidisciplinary approach that combines principles and practices from the fields of mathematics, statistics, artificial intelligence, and computer engineering to analyze large amounts of data. This analysis helps data scientists to ask and answer questions like what and why it happened and what can be done with the results. (What Is Data Science? - Data Science Explained - AWS, n.d.)

- Skills and knowledge

Fundamentals in math, stats and probability, programming, machine learning, optimization, simulation, text analytics, computer vision and business domain knowledge



The PETRONAS Digital Young Graduate Program has been an impressionable experience after witnessing the limitless potential of technology to transform industries. With the high-demand fields such as Software Engineering and Data Engineering, the program equips young professionals with critical skills and insights to address the challenges. It emphasizes not just technical growth but also collaboration, innovation, and problem-solving—qualities that are essential to thrive in today's digital landscape. This initiative is a testament to PETRONAS's commitment to nurturing the next generation of leaders in the digital era.

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