

PETRONAS

DIGITAL YOUNG GRADUATE PROGRAMME

WHAT IS YGP ?

A permanent employment opportunity in structured programmes catering specifically for fresh graduate that includes job learning, coaching and assessment.

SOFTWARE ENGINEERING

- Why?
 - > Jobs are expected to increase 22% from 2020 to 2030.
 - > Able to operate from anywhere.
 - > Expanding in the scope.
 - > One of the highest paid profession.
- What?
 - > Understand the concepts of computers, hardware architecture and software fundamentals.
 - > Understand programming languages, frameworks, design principles, tools to produce quality code.
 - > Specialise in a certain level of career
- Skills required?
 - > Analytical thinking & problem-solving skills.
 - > Programming & Productivity skills.
 - > Understanding of Product/Software development process
 - > Life-long learning
- What do software engineers do in PETRONAS?
 - > Utilizing drones or robots in management and equipment inspection
 - > Use wearables in terms of better equipment in data analysis.
 - > Apply digital twin to provide predictive and prescriptive functionalities.
 - > Applying real-time monitoring data center across Malaysia.

EXECUTIVE SUMMARY

YPG is a dynamic partner committed to creating a sustainable future through innovation in the energy industry. The company is looking for young, passionate talents who are eager to learn, work in teams, and make a difference in the energy sector. Their comprehensive training program focuses on skill development, performance coaching, leadership building, and industry knowledge, preparing individuals for impactful careers. Employment opportunities are available in key areas, including software engineering, data engineering, and data science, nurturing professionals who will drive progress and innovation in the energy industry.

LINE UP OF TRAINING

- Structured Upskilling
- Learning Buddy
- Performance Coaching
- Build leadership capabilities
- Immersion in Digital projects
- Energy Industry Knowledge

DATA ENGINEERING

- What?
 - > Collect & ingest all the data from multiple source
 - > Make sure data is being stored.
 - > Make the data available for the users
- Data Engineering Roles.
 - > Data Analyst, Business Intelligence Engineer, Data Modeler, Data Quality Engineer, Big Data Engineer, Data Architect and Data Engineer
- How PETRONAS make Data Engineers ready for the future?
 - > Instructor-led trainings, Self Paced Online Learning, Skill Assessment, On- Job Assignments, Masterclass series and certifications.

DATA SCIENCE

- What?
 - > Turn data to data products
(data -> information -> knowledge -> insights)
- 6 Key Attributes for successful career in Data Science.
 - > Curiosity, Learning Orientation, Explorative Mindset, Mathematics, Programming and storytelling
- Data Science Department in PETRONAS.
 - > Department members that includes data scientists who are experienced, fully trained, young and fresh.
 - > Diverse because ~30 education backgrounds, 40 % female and 60 % male and 10 % non-Malaysian
 - > Knowledge and skills in maths, business domain knowledge, programming.
 - > Capability Development Programs such as in-class learning, online learning, mentorship, coaching and so on.
 - > Over 60 Data Products

REFLECTION

From this career talk, various important points can be highlights on how jobs in Information Communication Technology (ICT) are essential in the industry, especially in relation to PETRONAS Digital Young Graduate Programme (YPG). ICT is crucial for driving innovation and efficiency in industries like energy. For PETRONAS, digital solutions are central to modernizing and managing operations, making them more sustainable and efficient. the move towards solution that are prepared for the future underlines the idea that technology is not just a support function but a central part of industry strategy, shaping how companies like PETRONAS evolve and compete.

The YGP emphasizes a structured development program for fresh graduates, demonstrating the importance of continuous learning in ICT. From structured upskilling and mentorship to hands-on projects, the approach focuses on equipping graduates with the necessary skills to thrive in a competitive environment. The emphasis on skills like analytical thinking, problem-solving, programming, and adaptability shows that ICT careers require a balance of technical expertise and soft skills like communication and leadership.



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