



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

SKILLS IN UNIVERSITY AND INDUSTRY

TECHNOLOGY AND INFORMATION SYSTEM (SECP1513)

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Group members:

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2. Joyce Puyang Maurice Utap (A24CS0090)
3. Sumaita Alam (A23CS4056)
4. Tang Shuhan (A23CS4058)
5. Vasila Sujavudeen (A23EC9012)

1. Introduction

On 17 December 2024, an alumnus of University of Technology Malaysia (UTM), Mr. Nik Mohd Habibullah Bin Nik Mohd Nizam delivered on the topic “Preparing Entrepreneurship in IT” in an aim to guide computer science undergraduate students in building a career path in the industry.

With over 12 years of experience, Mr. Nik has demonstrated expertise in software system analysis, operations management, and business development. He has also served as the manager of Micro Semiconductor Sdn Bhd, where he played a vital role in producing Malaysia's first locally made IoT product. Beyond his achievements, Mr. Nik launched multiple startups such as GetMe Technology PLT, DatSINI Sdn Bhd and Dialysis Manager.



Figure 1: Mr Nik as the speaker introduced his education and career background regarding in Information Technology (IT)

2. Skills required for computer science

The speaker highlighted that mastering the fundamentals of programming, data structures, and algorithms is crucial for computer science students. Additionally, understanding databases, software development methodologies, and networking is essential. Problem-solving, analytical thinking, and a continuous learning mindset are emphasized as key skills.

Team projects, internships, and participation in coding competitions can further enhance a student's abilities and practical knowledge. Mr. Nik recommended focusing on specialization areas such as artificial intelligence, cybersecurity, or cloud computing to stay competitive in the rapidly evolving tech landscape.

3. Skills required for industry

Industries seek graduates who possess not only technical expertise but also soft skills such as teamwork, communication, and critical thinking. The ability to adapt to new technologies and learn independently is highly valued.

Mr. Nik underscored the importance of entrepreneurship and innovation skills, encouraging students to develop their ideas and participate in hackathons and startup programs. Experience with version control systems, cloud platforms, and IoT technologies is beneficial, reflecting the current industry demand.

4. Reflection

Group Members	Descriptions
Abdullah Al Toufiq	I will focus on mastering the fundamentals like programming and data structures, stay updated with industry trends, network with professionals, maintain strong academics, and develop soft skills like communication.
Joyce Puyang Maurice Utap	In the next four years, I will participate in computer science related workshops and seminars while working on coding projects based on real-world problems to improve my computer science knowledge.
Sumaita Alam	Over the next four years, I will focus on strengthening my understanding of data structures and algorithms through intensive study and practice so that I can build a strong portfolio for career building.
Tang Shuhan	I will first learn and master the basic knowledge related to programming, algorithms, data structures and databases, and then participate in actual projects or look for internship opportunities.
Vasila Sujavudeen	To succeed in computer science over the next four years, I will focus on mastering core concepts like algorithms, data structures, and programming, while developing communication skills and teamwork.

5. References

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Mohd, A. S., Muhammad, R. H., Husnayati, H. & Asadullah, S. (2012). Information and communication technology workforce employability in Malaysia. *Department of Information Systems, International Islamic University Malaysia*, Kuala Lumpur, Malaysia.