General

UMP introduces Bachelor's Degree in Applied Science (Data Analytics)

Thu, 08/08/2019 - 15:51

In response to the increasing demand for data scientists and analysts, the Faculty of Industrial Sciences & Technology (FIST) at Universiti Malaysia Pahang (UMP) recently announced the inauguration of a new degree programme called Bachelor of Applied Science (Honours) in Data Analytics.

According to the Dean of FIST, Associate Professor Dr. Mohd Hasbi Ab Rahim, the new degree programme was developed in line with UMP's vision, mission and educational goals of becoming a distinguished technological university.

With a tagline, "Powered by Data, Insight by Analytics", Associate Professor Dr. Mohd Hasbi said the three-and-a-half year programme – two-and-a-half years at the university and the balance one year at the industry (2u2i) – was designed to produce highly-skilled and competent graduates in the field of Data Science and Analytics, who are capable of gaining insights into available data and make effective decisions.

"Implemented in the 2u2i mode, UMP graduates of Data Analytics programme will be equipped with in-depth knowledge of Data Science and Analytics to become an expert analyst, capable of using the latest data management and analytics tools," said the Dean.

"They will learn how to apply mathematical programming; data preparation and visualization skills; statistical modelling; machine-learning algorithm; advanced analytical and managerial; and research and practical skills in real world industrial applications," he added.

Associate Professor Dr. Mohd Hasbi explained that the new degree programme will focus on two key roles of data science teams in career development, which are data analyst and data scientist. "Data Analytics degree graduates from UMP will subsequently build a career as data science professionals in various sectors and industries."

In a report published in October 2012, Harvard Business Review described the profession of data scientist and data analyst as the "Sexiest Job of the 21st Century".

"Data analyst plays an important role in deriving value and seeking patterns from data to assist organisations in the development of their predictive capabilities. Data scientist will use analytical techniques combined with data skills to develop scalable and robust analytical models," the Dean of FIST highlighted, adding that other promising careers include Data Technopreneur, Programmer, Digital Data Analyst, Statistician and Business & Marketing Analyst.

Prior to the new degree programme inauguration, FIST approached 21 companies from various industries – with potentials to be appointed as its 2u2i Strategic Industry Partners – such as

Malaysian Digital Economy Corporation (MDEC), the Department of Statistics, Talent Corporation Malaysia Sdn Bhd, Telekom Malaysia Bhd, Petronas Gas Bhd, Neu Zenith Sdn Bhd and Abyres Sdn Bhd.

“These strategic industry partners will now accept UMP undergraduates of Bachelor of Applied Science (Honours) Data Analytics to experience work-based learning (WBL) at their company premises,” Associate Professor Dr. Mohd Hasbi said.

He further explained that Data Science and Analytics is a new exponentially growing field consisting of a set of tools, techniques and integrated skills-set from statistics, mathematics, computer science and the use of current technology in computer software and programming language.

“The Data Science and Analytics elements are part of the main pillars of the Fourth Industrial Revolution (IR4.0), which gives birth to new emerging technologies – including automation, digitilazation and artificial intelligence (AI).

“In turn, these new technologies will bring forward new challenges in data science, especially with the discovery of information from large volumes of data.”

In a keynote speech at the “International Conference on Industrial and Applied Mathematics & Statistics 2019” (ICoAIMS 2019), the Chief Statistician from the Department of Statistics Malaysia, Dato’ Sri Dr. Mohd Uzir Mahidin, stated that statistics and mathematics can help build new knowledge from data of various resources, and they can have an enormous effect on industrial revolutions.

“Living in the era of big data, our daily life is surrounded by statistics. It can provide useful information on what is happening around us, in the past, present and future,” said Dato’ Sri Dr. Mohd Uzir.

MDEC, as the country’s regulator of digital economy, also emphasizes the importance of Data Science, saying industries nowadays require the expertise of data scientists and analysts to cope with the rapid pace of IR4.0 evolvement in Malaysia – circa 20,000 data professionals are in demand by the next year.

- 955 views

View PDF