FPJB & Jabatan	Pusat Keselamatan Siber Dan Revolusi Industri Digital (PKS&RID)
Nama Program	**Data Science with Predictive Analytics**
Sinopsis	The course is designed to provide the participants with an extensive hands-on exercise to experience the concepts and tools to practice systematic exploitation of big data, coupled with analytics that can reveal opportunities for better decision making. The course will expose the participants with data analytic techniques together with artificial intelligence (AI) and/or machine learning in solving complex business problems or service challenges.
Hasil Pembelajaran (Learning Outcomes)	Student be able to 1. Understand the basics of analytics, machine learning and data science. 2. Understand the importance of plans for the model to deployment into production, and how to drive action. 3. Apply the basic model selection, evaluation and uses of ML models.
Kaedah Pelaksanaan (Mode of Delivery)	Lectures/ Case Study/ Presentation
Tempoh Pengajian (Duration of Study)	3 working days
Kumpulan Sasaran (Target Participant)	Information System analyst, Data Science practitioner, Officers who interested in predictive analytics.
Syarat Permohonan/ Admission Requirement	Basic computer knowledge is required for this course.
Struktur Kursus (Course Outline) / Struktur Kurikulum (Topics Covered)	**Day 1 – General Topics** 1. Cross-Industry Standard Process for Data Mining (CRISP-DM) 2. Familiarising the Use Cases for ML. 3. How and when to use Graphics and Visualizations. **Day 2 - Basics of Analytics, Machine Learning, and Data Science.** 1. Ways of categorizing Analytics. 2. Descriptive Modelling. 3. Predictive Analytics. 4. Prescriptive Analytics. 5. Text Analytics. 6. Data Science (DS) 7. Categorizing Machine Learning (ML). 8. Model Validation. **Day 3 – Model selection, evaluation, and uses of ML models.** 1. How to evaluate models. 2. Model interpretation, explanation, performance, and improvements. 3. Deployment into production. 4. Various ways to explain predictions. 5. How to interpret model performance, confidence or variance.
Yuran Kursus (Course Fee)	**RM4,500 per person**