

Course Structure and Synopsis of Proposed Modules for Work-Study Diploma in AI & Data Intelligence (AI Specialisation)

S/N	Module	Hours
1	<p>Programming for Data & AI</p> <p>On completion of the module, trainees should be able to develop program codes by creating program logic, writing program codes and debugging program.</p>	100
2	<p>AI Governance</p> <p>On completion of the module, trainees should be able to manage compliance to data and AI governance processes, as well as mitigate non-compliance incidents.</p>	100
3	<p>Advanced Data Insights</p> <p>On completion of the module, trainees should be able to perform data processing, analysis and visualisation using data analytics tools.</p>	100
4	<p>Data Preparation & Feature Engineering</p> <p>On completion of the module, trainees should be able to inspect data quality and perform feature extraction, as well as prepare train-test-validate subsets for model building.</p>	100
5	<p>AI Model Design & Development</p> <p>On completion of the module, trainees should be able to build and fine-tune AI models according to AI model requirements.</p>	100
6	<p>Machine Learning Pipeline</p> <p>On completion of the module, trainees should be able to develop ML pipeline workflow by designing and automating pipeline workflow, as well as debugging workflow issues.</p>	100
7	<p>AI Operations</p> <p>On completion of the module, trainees should be able to design and deploy AI operation, as well as evaluate performance metrics.</p>	100
8	<p>AI Solution Design & Development</p> <p>On completion of the module, trainees should be able to address a problem statement through AI solution development. They should also be able to deploy AI model or pipeline workflow and implement ML system.</p>	100
9	<p>Company Project</p> <p>On completion of the module, trainees should have applied their acquired competencies in an authentic project that would value-add to the company.</p>	100
10	<p>On-the-Job Training</p> <p>On completion of the module, trainees should be able to apply the skills and knowledge acquired at ITE College and workplace to take on the full job scope, including supervisory function where appropriate, at the company.</p>	3100