**Student Internship Programme (SIP) Learning Outcomes Form**

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| **Student Name** | ABC | | | **Admission No.** | [Admin No] |
| **SIP Organisation** | [SIP Organisation] | | | **SIP Start Date** | [SIP Start Date] |
| **School** | Informatics & IT | **Diploma** | [Student Diploma] | **SIP End Date** | [SIP End Date] |

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| **Learning Outcomes** | | | | | | | |
| **SN** | **Main Tasks**  **(**Minimum 3 main tasks)  *(optional to include Task Elements)* | **Knowledge** | **Skills** | **Attitude** | **Training Guidelines**  *(Highlight the methods & training materials used to carry out the training)* | **Hours**  (*list estimated time that the Main Task requires)* | **Completed**  **✓** |
| (*list the Knowledge, Skills, and Attitude to accomplish the task)* | | |
| 1 | Task #1  Establish the setup and maintenance of IoT-integrated network systems  Set up and configure IoT sensors for data collection  Establish reliable connections between sensors and host devices (e.g. servers) via wired or wireless (e.g. Bluetooth) interfaces  Set up physical servers or remote computing environments to deploy and execute data processing algorithms  Troubleshoot connectivity and configuration issues during deployment and integration | **Knowledge**  IoT communication protocols (Bluetooth, Ethernet)  Networking Fundamentals   Sensor setup and configuration  Data preprocessing algorithms and server configurations | **Skills**  IoT device configuration  Interpersonal and Collaboration Skills  Personal Effectivess | **Attitude**  Communication  Team-Oriented  Commitment to Quality | Instruct learners to practice eliciting requirements.  Emphasizing factors like business value while prioritizing requirements  Organization’s documentation templates and standards. | 33% | *Ticked by Liaison Officer* |
| **2** | Task #2  Research software tools and technologies to support department’s needs  Compare available technologies based on features, usability, integration potential and cost  Research and potentially implement hardware or software solutions to enhance existing systems  Summarise findings to support informed decision-making | **Knowledge**  Methodologies in software development  Procedures and process of software development  Data preparation techniques | **Skills**  Critical Thinking  Curiosity and Independent Learning  Personal Effectivess | **Attitude**  Analytical Thinking  Meticulous  Resourceful | Applications of common software design patterns.  Facilitate exercises for software design review for different scenarios.  Software design tool installation and usage | 33% |  |
| **3** | Task #3  Testing and demonstration of live VA (Video Analytics) systems  Conducted stress testing on Video Analytics systems to report back issues such as model accuracies, performance bottlenecks or detection delays to ensure accuracy and stability  Assist in setting up and demonstrating systems in controlled scenarios for stakeholder evaluation  select key demonstration actions to highlight model strengths and ensure optimal system performance during presentations | **Knowledge**  Typical business processes and functional requirements  Indicators of software success and failure  Procedures and process of software testing | **Skills**  Critical Thinking  Interpersonal and Collaboration Skills  Personal Effectivess | **Attitude**  Commitment to Quality  Attention to Detail  Professionalism | Instruct learners to practice with testing tools.  Expose learners to real-world examples relating to testing methods and tools  Facilitate exercises for software design review for different scenarios. | 33% |  |
| **4** | Task #4  Machine Learning Model Development Lifecycle  Conduct data collection and preprocessing to prepare collected data for model training  Train machine learning models based on prepared datasets  Fine tuned models to optimise performance and accuracy  Integrate real-world feedback to continuously improve model predictions and performance by training It with new data |  |  |  |  |  |  |
| **5** | Task #5 |  |  |  |  |  |  |

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| **Learning Outcomes:** |  |  |  |  |  |
| **(Agreed before start of SIP)** | Name and Signature |  | Name and Signature |  | Name and Signature |
|  | **SIP Company Supervisor** |  | **Liaison Officer** |  | **Student** |
|  | Date: Click or tap to enter a date. |  | Date: Click or tap to enter a date. |  | Date: Click or tap to enter a date. |