3408 Program Vocational Learning Outcome

Program Vocational Learning Outcomes describe what graduates of the program have demonstrated they can do with the knowledge and skills they have achieved during their studies. The outcomes are closely tied to the needs of the workplace. Through assessment (e.g., assignments and tests), students verify their ability to reliably perform these outcomes before graduating.

1. identify, analyze, develop, implement, verify and document the requirements for a computing environment.

2. contribute to the diagnostics, troubleshooting, documenting and monitoring of technical problems using appropriate methodologies and tools.

3. implement and maintain secure computing environments.

4. implement robust computing system solutions through validation testing that aligns with industry best practices.

5. communicate and collaborate with team members and stakeholders to ensure effective working relationships.

6. select and apply strategies for personal and professional development to enhance work performance.

7. apply project management principles and tools when working on projects within a computing environment.

8. adhere to ethical, legal, and regulatory requirements and/or principles in the development and management of computing solutions and systems.

9. support the analysis and definition of the specifications of a software system based on requirements engineering processes and techniques.

10. contribute to the design, development, integration, documentation, implementation, testing and maintenance of software systems based on software engineering methodologies, modern programming paradigms and frameworks.

11. apply software engineering design techniques, data structures, algorithms, and patterns to the implementation of a software system.

12. design, model, implement and maintain a database for a software system.

13. contribute to the development, maintenance and deployment of software systems to resolve basic networking issues.

14. contribute to building automated software solutions by supporting the analysis, evaluation and integration of intelligent systems into applications.

15. use appropriate testing, verification and evaluation procedures to assess software quality and improve software performance.

16. Create innovative concepts that contribute to the development of new software products and/or the enhancement of existing ones.