TECHNICAL PROFESSIONAL

ICT - COMPUTER PROGRAMMING, NET

Grade 11 or 12

Three-Term Budget Of Work (BOW)
for Learning Competencies

TECHNICAL PROFESSIONAL
ICT - ICT SUPPORT AND COMPUTER PROGRAMMING TECHNOLOGIES
Grade 11 or Grade 12

Three-Term Budget Of Work
For Learning Competencies

Please note that each elective under TechPro: ICT is studied for one term. This is applicable under Grades 11 and 12.

Term	
Elective	**Computer Programming, Net**
Week	**Learning Competency**
*	• Discuss the HTML fundamentals. • Use paragraph formatting elements. • Apply list attributes and values in web page designs. • Create HTML documents with multimedia elements. • Use table elements, attributes, and values in designing web pages. • Create hyperlinks between web pages. • Use frames in designing web pages. • Create HTML form web pages and provide fields where user can enter data. • Perform installation of Integrated Development Environment (IDE) application. • Discuss Cascading Style Sheet (CSS) fundamentals. • Apply the different CSS Selectors.
*	• Apply CSS text, font, and color in designing web pages. • Apply CSS gradient and opacity.

	• Create layouts of web pages using the CSS box model. • Use the CSS list and link properties and values in creating web pages. • Utilizes CSS Z-index, position, float properties and values in designing web pages. • Create web pages with a CSS image gallery. • Apply CSS pseudo class and elements. • Apply CSS flexbox layout and media queries in web designs. • Create responsive websites using CSS Responsive Web Development (RWD) Layouts. • Discuss the fundamentals of JavaScript. • Demonstrate the structures of statements, algorithm, flowchart, and pseudocode. • Apply variables, data types, and functions in creating web applications. • Use JavaScript operators in problem solving. • Use event handlers and event listeners in creating web applications. • Use conditional and switch statements in creating web applications. • Apply loops in creating a program using while, do while, and for loops. • Use JavaScript arrays in creating a program. • Create objects to display the set of properties and values. • Apply Document Object Model (DOM) nodes in creating a web document.
*	• Discuss the C# fundamentals. • Use C# data types, variables, strings, and constants in creating a web application. • Apply C# operators and decision making in problem solving. • Use the C# iteration statements in creating a web application. • Apply C# classes, methods and structure in creating a web application. • Create web application programs that contains C# arrays. • Apply the C# Object-Oriented Programming (OOP) approach in creating a web application. • Utilize the C# file input/output in creating, deleting, and reading web applications. • Discuss the ASP.NET Model View Controller (MVC).

	• Discuss the ASP.NET MVC environment and life cycle. • Perform configurations of the routing process in directing an http request in an ASP.NET MVC project using controllers and actions. • Use filters, selectors, and views in creating projects. • Apply the ASP.NET MVC - data model. • Use ASP.NET MVC – helpers in creating realistic HTML controls. • Create bridges between the http request and the action methods (Model Binding). • Discuss the framework of ASP.NET MVC – database and adding validation to a model. • Execute security features in a web application. • Create ASP.NET MVC - web application program interface (API). • Convert website to mobile version. • Compute the service costs for web development, web hosting.

** Teachers may assign learning competencies per week depending on the needs of the learners.*