



### **Semester 1 – TC622 – Computer Coding – Introductory Unit**

Through the use of guided instruction, problem solving and online tutorials, students will design and produce computer programs and simple games, learning the basics of computer coding with a real world focus. They will begin to program online resources (author websites) and develop basic games using Visual Studio. Students will develop problem solving skills, logic sequencing and syntax principles to achieve the desired outcome. A variety of tasks will be given over the semester following the software design life cycle.

#### **Assessment**

Assessment will be completed in class. Students will complete one major challenge per unit involving a detailed design write up as well as digital computer theory involved in the product being designed. Students will follow industry standards.

### **Semester 1 – TC633 – Web & Database Design (must have completed TC622)**

This course is built on the foundations of TC622. Through the use of guided instruction, problem solving and online tutorials, students will design and produce websites using Adobe Dreamweaver, learning the basics of online design and publishing. They will develop a detailed design, the application itself and reflect on future versions of their programs. Students will also discover how databases are structured and store information and plan to develop their own databases in Microsoft Access.

They will begin to program computer applications and become online digital authors. Students will learn problem solving skills, logical sequencing and syntax principals to achieve the desired outcome. A variety of tasks will be given over the semester utilising the Software Development Life Cycle.

#### **Assessment**

Assessment will be completed in class. Students will complete one major challenge per unit involving a detailed design write up as well as digital computer theory involved in the product being designed. Students will follow industry standards.

### **Semester 1 – TC722 App Development (must have completed TC633)**

Through the use of guided instruction, problem solving and online instruction, students will design and produce **mobile Apps**. The emphasis will be on **understanding mobile apps and become digital authors**. Following the Software Development Lifecycle, students will design and develop user friendly mobile applications for mobile devices and tablets. Students will learn problem solving skills, to achieve the desired outcome. A variety of tasks will be given over the semester.

#### **Assessment**

Assessment will be completed in class. Students will complete a variety of tasks with a focus on one major challenge per unit following the software development lifecycle. Students will also test their projects and that of their peers to determine the best possible projects that they can create.

### **Semester 2 – TC622 Computer Coding – Introductory Unit**

Through the use of guided instruction, problem solving and online tutorials, students will design and produce computer programs and simple games, learning the basics of computer coding with a real world focus. They will begin to program online resources (author websites) and develop basic games using Visual Studio. Students will develop problem solving skills, logic sequencing and syntax principles to achieve the desired outcome. A variety of tasks will be given over the semester following the software design life cycle.

#### **Assessment**

Assessment will be completed in class. Students will complete one major challenge per unit involving a detailed design write up as well as digital computer theory involved in the product being designed. Students will follow industry standards.

## Semester 2 – TC633 – Web & Database Design (must have completed TC622)

This course is built on the foundations of TC622. Through the use of guided instruction, problem solving and online tutorials, students will design and produce websites using Adobe Dreamweaver, learning the basics of online design and publishing. They will develop a detailed design, the application itself and reflect on future versions of their programs. Students will also discover how databases are structured and store information and plan to develop their own databases in Microsoft Access.

They will begin to program computer applications and become online digital authors. Students will learn problem solving skills, logical sequencing and syntax principals to achieve the desired outcome. A variety of tasks will be given over the semester utilising the Software Development Life Cycle.

### Assessment

Assessment will be completed in class. Students will complete a one major challenge per unit involving a detailed design write up as well as digital computer theory involved in the product being designed. Students will follow industry standards.

## Semester 2 – TC722 App Development (must have completed TC633)

Through the use of guided instruction, problem solving and online instruction, students will design and produce **mobile Apps**. The emphasis will be on **efficient and effective program design to achieve a creative outcome**. Following the Software Development Lifecycle, students will design and develop user friendly applications. They will also review their programs and reflect on future versions of their apps.

Students will learn problem solving skills, syntax principals and logical sequencing to achieve the desired outcome. A variety of tasks will be given over the semester to give the students exposure to different programming elements.

### Assessment

Assessment will be completed in class. Students will complete a variety of tasks with a focus on one major challenge per unit following the software development lifecycle. Students will also test their projects and that of their peers to determine the best possible projects that they can create.

## Semester 2 – TC733 System Development (must have completed TC722)

Through the use of guided instruction, problem solving and online instruction, students will design and produce a **Network for a fictional small business**. The emphasis will be on **business outcomes and effective technical computer ability**. Students will design and develop their solution and learn ways on how to sell their solution to a target audience. Students will learn problem solving skills and enhance research abilities to achieve the desired outcome.

Students will continue learning about app development and enhance their skills in User Experience using the Software Development Life Cycle. The platforms will be for mobile and tablet.

### Assessment

Assessment will be completed in class. Students will complete a variety of tasks with a focus on one major challenge per unit following the software development lifecycle. Students will also test their projects and that of their peers to determine the best possible projects that they can create.