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| **Project (2)** | **Module Title:** |
| **CAP 497** | **Module ID:** |
| **CAP 496** | **Prerequisite:** |
| **8** | **Level:** |
| **4 (2+4+0)** | **Credit Hours:** |

**Module Description:**

In this course, each group will continue developing the software systems started in CAP 496. Each group must use a particular tool to implement its system in a good programming practice. This implementation tool is preferably new –i.e. not taken in previous courses. Furthermore, students must generate a user manual for their information system in an appropriate format. At the end of the term, each group must submit a final report, which documents completely the information system from the problem definition phase to the implementation phase and contains a user manual for the information system. Teamwork, leadership, communication and writing skills are all important ingredients for a successful project.

**Module Aims:**

* The course enables students to demonstrate their theoretical knowledge and professional skills.
* An ability to design and conduct experiments, as well as to analyze and interpret data.
* An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
* An ability to function on multidisciplinary teams.
* An understanding of professional and ethical responsibility.
* An ability to communicate effectively.
* The broad education necessary to understand the impact of information systems in a global, economic, environmental, and societal context.
* A recognition of the need for, and an ability to engage in life-long learning.
* A knowledge of contemporary issues.

**Learning Outcomes:**

* An ability to apply knowledge of computing and mathematics appropriate to the discipline
* An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
* An ability to use current techniques, skills, and tools necessary for computing practice.
* An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
* An ability to analyze the local and global impact of computing on individuals, organizations, and society
* An ability to function effectively on teams to accomplish a common goal
* An understanding of professional, ethical, legal, security and social issues and responsibilities
* Recognition of the need for and an ability to engage in continuing professional development
* An ability to communicate effectively with a range of audiences

**Textbook:**

None