CGS: Computer General Studies Courses

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## Courses

#### CGS 2020 Introduction to Machine Learning

College of Sci and Engineering, Department of Cybersecurity & Info Tech

3 sh (may not be repeated for credit) Prerequisite: STA 2023 OR MAC 1140

This course offers an introduction to machine learning that is designed for an interdisciplinary audience. Students in this course will explore the machine learning landscape including the scope and its applicability in a wider context and in a variety of disciplines. This course will also provide students with an overview of the field of data science should they like to pursue it as their choice in higher education. Meets General Education requirement in Natural Sciences.

#### **CGS 2570 Personal Computer Applications**

College of Sci and Engineering, Department of Computer Science

3 sh (may not be repeated for credit)

An online course that provides practical experience with current and popular office software tools and exposure to the fundamentals of computing and networks. Issues in privacy, ethics, personal conduct, and security in professional settings are also covered. Students learn to use word processing, spreadsheet, presentation, and database software.

#### CGS 2920 Foundations in Information Technology

College of Sci and Engineering, Department of Cybersecurity & Info Tech

1 sh (may not be repeated for credit)

This course will serve as a program cornerstone, introducing students to the program learning outcomes for the B.S. in Information Technology degree program. Students will also begin the process of assessing academic and professional goals, including evaluating potential capstone experiences/goals, considering professional development opportunities within and outside UWF, and evaluating interest in graduate studies.

# CGS 3183 Basic Web Applications

College of Sci and Engineering, Department of Cybersecurity & Info

3 sh (may not be repeated for credit)

Prerequisite: CGS 2570

Introduces the student to the concepts and principles of designing software tools used in web applications. The student will gain hands on experience in developing, manipulating, and implementing web tools such as a databases and server-side programming. Credit may not be received in both CGS 3183 and CGS 3172.

#### CGS 3464 Programming Using Visual Basic

College of Sci and Engineering, Department of Cybersecurity & Info Tech

3 sh (may not be repeated for credit)

Prerequisite: CGS 2570

An introductory course in programming for non-majors. Incorporates the basic concepts of programming, programming logic and problem solving, as well as the design features of a visual, event driven language. Students will use a visual interface to program useful applications. Credit cannot be earned in both COP 3826 and CGS 3464.

#### CGS 3763 Operating Systems Concepts

College of Sci and Engineering, Department of Cybersecurity & Info Tech

3 sh (may not be repeated for credit)

Prerequisite: (COP 2253 OR COP 2334 OR COP 2830) AND (CGS 2920\*)

This course introduces students to the major components of most operating systems. It begins with an overview of the structure and layers of an operating system. Emphasis will be given to process management, memory management, file systems, input/output, storage management, and design principles. This course will include topics related to security and virtual machines.

#### CGS 4905 Directed Study

College of Sci and Engineering, Department of Computer Science

1-12 sh (may be repeated indefinitely for credit)

**CGS 4912 Undergraduate Research in Information Technology** College of Sci and Engineering, Department of Cybersecurity & Info Tech

1-3 sh (may be repeated for up to 6 sh of credit)

Prerequisite: CGS 2920

Students will propose, design, and perform a research project in consultation with a UWF professor, who will serve as research supervisor. Research will be summarized and presented within the department and University. Permission is required.

## CGS 4935 Senior Seminar in Information Technology

College of Sci and Engineering, Department of Cybersecurity & Info Tech

2 sh (may not be repeated for credit)

Prerequisite: CIS 4947\* OR CGS 4912\* OR CIS 3949\* OR CTS 4911\*

Students will meet with Information Technology professionals and faculty to learn about professional issues and responsibilities, employability skills and careers in Information Technology. This will help students understand the job market so they will be able to transfer skills to future job positions. Students will also reflect on their experiences with the program's student learning outcomes.

#### CGS 5905 Directed Study

College of Sci and Engineering, Department of Computer Science

1-12 sh (may be repeated indefinitely for credit)

### CGS 6905 Directed Study

College of Sci and Engineering, Department of Computer Science

1-12 sh (may be repeated indefinitely for credit)

\* This course may be taken prior to or during the same term.