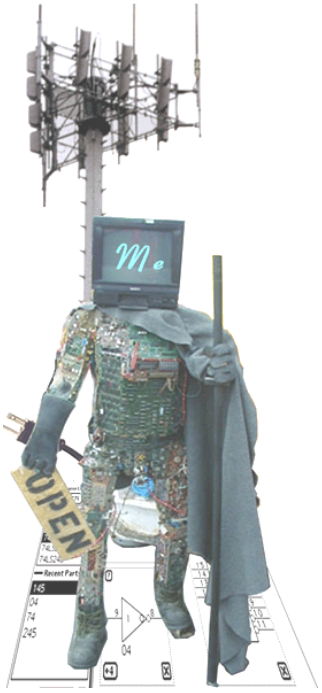
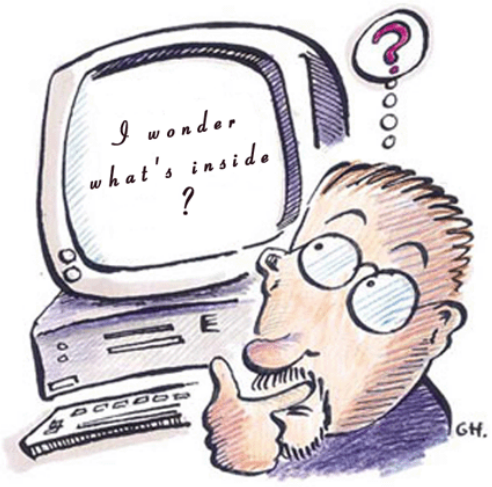
Computronic Technology At City College of San Francisco

It is well known that computers are the offspring of electronics, and that the limitations of what computers can do are ultimately the limitations of their electronic circuits. However, the day-to-day use of computers is based on the software that they can run.

Computronic is the reemerging (or remarriage) of computers and electronic hardware. It is the realization that the two are entwined in a symbolic relationship, and that to understand one, the other must also be understood.





Computronic Technology is the repairing, troubleshooting, setting up, and upgrading of computers and local area networks. It recognizes that the effective computer repair technician is a person who possesses a wide variety of skills including, use of hand tools, and a knowledge of basic electrical principles, use of electronic test equipment, computer operating systems, and the relationship of hardware to software.

If you are someone who likes to work with their hands as well as with their mind, Computronics may be just the field for you. Computronic is the analysis and repair of computers and local area networks.

For more information contact the following:

Rosemary Johnson at Southeast Campus - Counseling Office (415)550-4320

Keith Mueller at Ocean Campus - Engineering Program Advisor (415) 452-4729

Computronic Technology

Requirements for the Certificate of Completion. Students may obtain the certificate of completion in Computronic Technology by completing the following courses with a grade of C or higher in each course. A minimum of two of the courses must be taken at City College of San Francisco.

Courses	Units
ET 60 Electronics I-DC/AC Circuit Analysis ……	4
ET 53 Computers in Engineering Technology……...	2
ET 54 Microcomputer Setup, Maintenance & Repair……	2
ET 55 Advanced Microcomputer Repair……	2

ET 53. Computers in Engineering Technology (2)
Lec-1, lab-3
An introduction to DOS and Windows operating systems, and to their use in running application programs. This course will also cover some computer architecture and programming and is a useful lead-in to computer hardware troubleshooting. CSU

ET 54. Microcomputer Setup, Maintenance, and Repair (2)
Lec-1, lab-3
Hands-on practice in maintaining hardware of MS-DOS (PC, XT, AT, 386, 486, and Pentium) computers. Includes dismantling, examining, testing, and diagnosing a computer and loading an operating system and other programs into a computer. CSU

ET 55. Advanced Microcomputer Repair (2)
Lec-1, lab-3
Prereq.: ET 54
Repeat: max. 6 units
This second course in PC hardware will concentrate on troubleshooting, interfacing, and upgrading of MS-DOS and Windows (PC, XT, AT, 386, 486 and Pentium) computers. A more detailed looks at memory subsystems, interrupts, and memory and port addressing. SCSI, CD ROMs, sound cards, tape and disk backup systems, the hardware of local area networks, and methods of obtaining technical information. When time and hardware are available, Apple Macintoshes will also be studied. CSU

ET 60. Electronics I - DC and AC Circuit Analysis (4)
Lec-2, lab-6
Principles of direct and alternating current circuit analysis; electrical and magnetic fields applied to capacitance and inductance; emphasis on basic laws. Complementary laboratory work emphasizing circuit connections, instruments and measurement. CSU