



Course Requirements for Advanced Technology Studies Certificate

A. Required Major Courses (18 SHC)

Student and academic advisor will select 18 SHC from the approved list below.

Total Semester Hours Credit required for graduation: 18

Certificate in Advanced Technology Studies Credential: Certificate in Advanced Technology Studies C5528000

The Certificate in Advanced Technology Studies (CATS) is a contract program in which the student and an academic advisor work together to design a sequence of existing courses to meet specific employment and educational objectives.

The importance of lifelong learning for all workers in a high technology environment is well documented. The purpose of the Certificate in Advanced Technology Studies is to offer the Associate of Applied Science graduate an opportunity to undertake an interdisciplinary program of study that expands and broadens technology, computer, and business skills and knowledge that is geared to the student's personal career interests. This program is distinct from the usual certificate program in that it is not a specialized study in a single discipline.

The certificate requirements consist of 18 hours of technical course work from an approved course list. The admission requirement is the prior attainment of an Associates degree in a technical field. The 18-hour program is developed by each student in consultation with his or her academic advisor, who will be assigned to the student following admission to the program. Most of the courses will consist of 200 level courses, although the program allows for up to 6 credit hours of 100 level courses in order to satisfy any prerequisites. The program allows for independent study course work as well.

CATS students might be manufacturing supervisors seeking to upgrade their knowledge of computers and supervisory skills, or technicians wanting to learn more about CAD/CAM and local area networks. The program is designed to be flexible and accommodating to the needs of the student. Courses can be taken daytime, nighttime, or, in some cases, via distance education delivery. Students can begin the program in either the fall, spring, or summer semester and, by taking one course each fall and spring semester, can finish the program in about two years. Of course, the program can be completed in less time if that is desirable.

Since the objective of the program is a broadening of knowledge, students are encouraged to select courses that span a number of different fields and disciplines. A focused concentration in a single discipline will normally lead to enough credits to obtain an Associates Degree in that field.

Academic Standards: See General Academic Standards on page 19 (*Gen. Info* section).

Program Length: 2 semesters

Program Site: Lee Campus – Day

			C-L-SHC
BUS	137	Principles of Management	3-0-3
BUS	151	People Skills	3-0-3
BUS	255	Org. Behavior in Business	3-0-3
CIS	115	Intro to Programming & Logic	2-2-3
CIS	120	Spreadsheet I	2-2-3
CIS	128	Computer Language Survey	3-0-3
CIS	130	Survey of Operating Sys.	2-3-3
CIS	147	Operating Systems - Windows	2-2-3
CIS	148	Operating Systems – Windows - NT	2-2-3
CIS	169	Business Presentations	1-2-2
CIS	173	Network Theory	2-2-3
CIS	175	Network Management I	2-2-3
CIS	215	Hardware Install/Maintenance	2-3-3
CIS	246	Operating Systems - UNIX	2-3-3
CIS	275	Network Mgmt. II	2-2-3
CIS	277	Network Design/Implementation	2-2-3
CSC	135	COBOL Programming	2-3-3
CSC	138	RPG Programming	2-3-3
CSC	139	Visual BASIC Programming	2-3-3
CSC	143	Object Oriented Programming	2-3-3
CSC	238	Advanced RPG	2-3-3
CSC	235	Advanced COBOL	2-3-3
DFT	151	CAD I	2-3-3
DFT	152	CAD II	2-3-3
DFT	153	CAD III	2-3-3
ELN	231	Industrial Controls	2-3-3
ELN	232	Intro to Microprocessors	3-3-4
ELN	233	Microprocessor Systems	3-3-4
ELN	234	Communication Systems	3-3-4
ELN	236	Fiber Optics & Lasers	3-2-4
ELN	237	Local Area Networks	2-3-4
ISC	112	Industrial Safety	2-0-2
ISC	121	Environmental Health/Safety	3-0-3
ISC	131	Quality Mgmt.	3-0-3
ISC	210	Production/Operations Planning	3-0-3
LEO	111	Lasers & Applications	4-0-4
LEO	212	Photonics Applications	3-3-4
LEO	221	PC Interface	3-3-4
LEO	223	Fiber Optics	3-3-4
MAC	121	Intro to CNC	2-0-2
MEC	110	Intro to CAD/CAM	1-2-3
MEC	111	Machine Processes I	1-4-3
MEC	231	CAM I	1-4-3
NET	110	Data Communications/Networking	2-2-3
OMT	112	Materials Mgmt.	3-0-3
OMT	218	Developing Team Performance	3-0-3