

ECHOCARDIOGRAPHY AND VASCULAR ULTRASOUND

Associate in Science Degree

Employment possibilities include:

Noninvasive Cardiovascular Technologist

Echocardiographer/Echocardiography Technologist

Cerebrovascular Ultrasound Technologist

Program Outcome

Students will be prepared for entry-level employment as a professional and competent Cardiovascular Technologist to meet the needs of the local health care community.

Required prerequisites:

Electrocardiography Technician Certificate of Achievement

	Subtotal:	(31)
Required Courses		
Course		Units
FALL		
Intro to Echocardiography	CVT A200	(3)
Intro to Echocardiography Lab	CVT A205	(1)
Echocardiography Clin Lab 1	CVT A210	(5)
Sono Physics/Instrumentation	DMS A150	(4.5)
SPRING		
Adv Echocardiography	CVT A250	(2)
Adv Echocardiography Lab	CVT A255	(1)
Cerebrovascular Ultrasound	CVT A260	(2)
Echocardiography Clin Lab 2	CVT A265	(6)
	Subtotal:	(24.5)
	Total:	(55.5)

Students are required to obtain a grade of "C" or better in all prerequisites and required courses.

COMMERCIAL ART

NARRATIVE ILLUSTRATION

The Illustration Design option places its emphasis on a great variety of drawing and painting courses. The diversity of this curriculum may lead the student into career alternatives, such as illustrating for books, magazines, record album covers, and brochures.

Program Outcomes

Upon completion of this program graduates will be able to:

1. Create a series of illustrations in a variety of mediums demonstrating techniques and applications of current hands-on illustration techniques.
2. Demonstrate skill development in drawing, perspective, and various paint mediums.
3. Create a portfolio utilizing multiple design techniques for the purpose of gaining employment and/or acceptance to an art college or university for advanced learning.

CERTIFICATE OF ACHIEVEMENT

Required Courses			
Course			Units
FIRST SEMESTER			
Color & Design 2-D	ART	A110	(3)
Beginning Drawing	ART	A120	(3)
Introduction to Computer Graphics	DMAD	A181	(3)
Selected Electives			(2-3)
SECOND SEMESTER			
Life Drawing	ART	A121	(3)
Perspective	ART	A125	(3)
Story Illustration 1	ART	A143	(3)
Illustrator/Computer Graphics 1	DMAD	A190	(4)
THIRD SEMESTER			
Drawing 2	ART	A120	(3)
Painting 1	ART	A130	(3)
Figure Composition	ART	A220	(3)
Selected Electives			(2-3)
FOURTH SEMESTER			
Story Illustration 2	ART	A143	(3)
Professional Studies	ART	A180	(2.5)
Arts Internship	THEA	A181	(1-2)
Selected Electives			(2-3)
	Total:		(40.5-43.5)

Selected electives:

1st year electives:

Contemporary Art History	ART	A102	(3)
Book Arts	ART	A286	(2)
Introduction to Business	BUS	A100/H	(3)
Children's Literature	ENGL	A143/H	(3)
Introduction to marketing	MKTG	A100	(3)

2nd year electives:

Color & Design 3D	ART	A111	(3)
Product Illustration	ART	A118	(3)
Printmaking	ART	A170	(3)
Watercolor	ART	A263	(3)
Cartooning	ART	A269	(3)
Photo Graphics w/Photoshop	DMAD	A193	(4)

Total: (43-47)

ASSOCIATE DEGREE

Complete the Certificate of Achievement and Associate in Arts Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

COMPUTER INFORMATION SYSTEMS

The goal of the CIS program is to provide students with the technical skills and systems perspective necessary for entry-level positions in the computer and information industry. Students should not expect that they will necessarily meet the lower division requirements at specific colleges or universities. Students should consult the Transfer Information section of this catalog for specific transfer information.

BUSINESS APPLICATION DEVELOPMENT

Designed to provide a good foundation for students who are interested in developing computer applications. Students may choose courses in a number of areas to develop a general understanding of the field or they may choose to study a particular specialization or two in greater depth. In today's dynamic and changing technological environment, continuous professional upgrading is a requirement.

Program Outcome

Students will be prepared for employment in entry-level positions in the computer and information systems industries.

CERTIFICATE OF ACHIEVEMENT

CORE CURRICULUM

Required Courses

Course			Units
Financial Accounting	ACCT	A101	(4)
Intro to Computer Info Systems	CIS	A111	(3)
Intro to C# .NET Programming*	CS	A140	
(Or)			
Intro to VB .NET Programming*	CS	A142	(4)
(Or)			
Java Programming 1*	CS	A170	
Finite Math	MATH	A155	
(Or)			
Calculus 1	MATH	A180	
(Or)			(4)
Honors Calculus 1	MATH	A180H	
(Or)			
Calculus for BMSS	MATH	A140	

Total: (15)

Courses marked by asterisk () may not be used to satisfy both the core requirement and the specialization requirement.*

Students must complete the core curriculum plus 18 units from the following list of specialized application development courses. All courses do not need to be taken from the same area of specialization.

INTRODUCTORY PROGRAMMING

Course			Units
Intro to C# .NET Programming*	CS	A140	(4)
Intro to VB .NET Programming*	CS	A142	(4)
Java Programming 1*	CS	A170	(4)

TECHNICAL PROGRAMMING

Course			Units
Computer Architecture	CS	A116	(4)
C++ Programming 1	CS	A150	(4)
Windows .NET Programming	CS	A152	(4)
Data Structures	CS	A200	(4)
C++ Programming 2	CS	A250	(4)
Java Programming 2	CS	A272	(4)

WEB DEVELOPMENT

Course			Units
Intro to Web Page Design	CIS	A123	(2)
Intro to Dreamweaver MX	CIS	A128	(2)
Cascading Style Sheets (CSS)	CIS	A129	(2)
Bus Multimedia/Graphics	CIS	A132	(2)
Flash Programming	CIS	A141	(3)
JavaScript Programming	CIS	A171	(2)
JavaScript 2	CIS	A223	(3)
Digital Photo Premiere	CIS	A232	(3)

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