



Faculty Bartholet, Duggal, Schultz

This program is a blend between technical computer animation and art. The perspective graduate will develop skills in 2D and 3D animation coupled with color theory, material applications, and other art relevant principles. Individuals working in this area can become involved with filmmaking, video game development, accident reconstruction, and multimedia. Other fields include advertising, publishing, and business.

Associate of Science Degree

Major Code 5304

**Computer Aided Drafting and Design
Computer Graphics Design (Option)**

	Semester Hours
Core Requirements (p. 33)	25-26
CADD Core	24
Art Core	15
CADD Requirements	
CADD 110 Engineering Graphics I	3
CADD 115 Introduction to 3D CADD	3
CADD 270 2D Computer Animation	3
CADD 271 Graphic Information Tech I	3
CADD 272 3D Computer Animation	3
CADD 274 Digital Animation App.	3
CADD 276 Computer Animation Studio	3
CADD 450 Graphic Information Technology II	3

Art Core

Art 101 Basic Design	3
Art 240 Typography	3
Art 310 Watercolor	3
Art 325 Graphic Communications	3
Art 350 Graphic Communications II	3

Suggested Order of Study

Associate of Science Degree

Major Code 5304

**CADD-Computer Graphics
Design Option**

Freshman Year

1st Semester		Hours
Course		
CADD 110	Engineering Graphics I	3
CADD 270	2D Computer Animation	3
Art 101	Basic Design	3
CORE	[English 101]	3
CORE	[Comm 100]	3
		15

2nd Semester

CADD 115	Introduction to 3D CAD	3
CADD 271	Graphic Information Technology I	3
Art 240	Typography	3
CORE	[Math 30 or higher]	3
CORE	[Hist 110/120]	3
CORE	[Psy 100/Soc 110/Econ 180]	3
		18

Sophomore Year

1st Semester		Hours
Course		
CADD 272	3D Computer Animation	3
CADD 450	Graphic Information Technology II	3
Art 325	Graphic Communications I	3
Art 310	Watercolor	3
CORE	[Biology/Physics]	4-5
CORE	[Humanities/Fine Art]	3
		19-20

2nd Semester

CADD 274	Digital Animation Applications	3
CADD 276	Computer Animation Studio	3
ART 350	Graphic Communication II	3
CORE	[Kine 103 Lifetime Wellness]	2
CORE	[Kine 101 Physical Activity]	1
* MO Const. Test	OR PSc 120	3
		15-18

[Department Recommendation]

24 For additional information contact:

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Course Descriptions

CADD 270 (F) 3 hrs. cr.

2D Computer Animation

Fundamentals of computer animation. Develop skills with technology in 2D animation, sound editing, and general computer movie making. One hour lecture, four-hour labs. Prerequisites: CADD 110 or permission of the department.

CADD 271 (S) 3 hrs. cr.
Graphic Information Technology I
 Basic applications of data transfer and manipulations within industrial environments. Topics could include basic Internet applications, basic Web page design, introduction to data formatting for the Internet, and other topics as the technology changes. One hour lecture, four hours of lab.

CADD 272 (F) 3 hrs. cr.
3D Computer Animation
 Fundamentals of computer animation on a personal computer focusing on industrial applications, such as product promotion and marketing, motion simulation of machine elements and mechanisms, and its use in presentation, training, and instruction. This involves imparting movement and photo-realistic appearance to geometric shapes and models. One hour lecture, four hours of lab. Prerequisites: CADD 270 or permission of the department.

CADD 274 (S) 3 hrs. cr.
Digital Animation Applications
 Integration of real life forms with computer generated images, using state of the art scanning, digital touch probe, and motion capturing systems. One hour lecture, four hours of lab. Prerequisites: CADD 272 or permission of the department.

CADD 276 (S) 3 hrs. cr.
Computer Animation Studio
 Capstone course to enable students to develop professional material for their portfolio. Using the latest, state of the art computer animation tools to complete their studio requirements. One hour lecture, four hours of lab. Prerequisites: CADD 274 or permission of the department.

CADD 450 (F) 3 hrs. cr.
Graphical Information Technology II
 A seminar class applying the advanced applications of data transfer and manipulations within industrial environments. Topics could include advanced Internet applications, advanced Web page design, data formatting, and other topics as the technology changes. One hour lecture, four hours of lab. Prerequisite: CADD 271. (Cross listed in MIMS.)

Land Surveyor in Training Program of Study

Completion of the following classes will allow a person who has the necessary field experience and work related hours to sit for the Land Surveyor in Training licensing test in the State of Missouri. The Missouri Board of Architecture, Professional Engineering and Land Surveyors has approved this sequence of courses to meet statute Section 327.312.1(3) RSMo.

Suggested Order of Study

Land Surveyor in Training Program of Study

Course	Core Requirements	Hours
CADD		15
Spring		
1st Semester		
CADD 230	Elementary Surveying*	3
		3
Summer		
2nd Semester		
CADD 231	Advanced Surveying	3
CADD 234	Land & Survey Descriptions	3
		6

Fall
 3rd Semester
 CADD 232 Surveying Computations 3
 CADD 233 Boundary Control and Legal Principles 3
 6

*Trigonometry (Math 135) is a prerequisite to CADD 230. Course descriptions page 118.

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Faculty Duggal - Head, Bartholet

Computer Aided Drafting and Design Engineering Technology curriculum leads to an Associate of Science degree in CADDET. The curriculum prepares individuals to enter employment as drafters/designers in the fields of manufacturing, civil, architecture, or construction.

The requirements for the Associate of Science degree in CADDET provide a broad base of analytical, technical, and Core Curriculum courses. Computer Aided Drafting and Design hardware and software are used to enhance traditional instruction methods in all courses. Built into the curriculum is an emphasis on both the study and application of engineering design technology. The documents and drawings produced by the CADDET graduate would be based upon sketches, specifications, and calculations made by scientists, engineers, architects, and designers. Material specification is an essential part of the CADDET program of study.

Also, students are exposed to the latest CAD technology and the application of international standard systems of A.N.S.I. and I.S.O. Professional faculty maintain close ties with area industries to assure that high quality and currently used technology is taught.

Accredited by the Technology Accreditation Commission (TAC) of the Accreditation Board for Engineering and Technology (ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, Telephone: 410.347.7700.