

Required Courses	Course Title	FSU Prerequisites Shown in Parentheses ()	LCC Equivalent Courses		Grade	
Requirements			Other Eq. Course	Cr		
Foundation	DAGD 101	2D Visualization – Storyboards & Style Guides	FSU-GR	3	ARTS 226	
	DAGD 102	Story Development for Film & Gaming	FSU-GR	3		
	DAGD 103	3D Visualization – 3D Drawing & Sculpture	FSU-GR	3		
3D Animation	DAGD 100	3D Modeling & Animation I - Introduction to Computer Animation	FSU-GR		ARTS 234 CG/ 3D Animation I	3
	DAGD 230	3D Modeling & Animation II - Modeling & Animation (DAGD 100)	FSU-GR	3		
Gaming	DAGD 150	Introduction to Game Design & Development	FSU-GR	3		
	DAGD 310	User Interface Design (DAGD 150, GRDE 216, DAGD 260)	FSU-GR	3		
Multimedia	DAGD 260	Multimedia Authoring I	FSU-GR	3		
Web & Digital Imaging	GRDE 216	Electronic Imaging	FSU-GR		ARTS 171 Digital Imaging	3
	GRDE 226	Webpage Design (GRDE 216)	FSU-GR		ARTS 173 CG/ Web Design	3
Programming	SENG 100	Introduction to Computer Programming	FSU-GR		CITP 110 – Intro to Computer Programming	3
Digital Video	DAGD 180	Digital Video Production & Editing	FSU-GR		DMAG130 or ARTS 242	3
Business	APPS 301	Project Management	FSU-GR	3		
	BLAW 321	Contracts & Sales			LEGL 215 or LEGL 216	3
	MKTG 321	Principles of Marketing			MKTG 200	3
Professional Development	DAGD 220	Sophomore Portfolio (DAGD 100, GRDE 216)	FSU-GR	3		
	DAGD 340	Junior Project (DAGD 220, DAGD 335)	FSU-GR	3		
	DAGD 491	Applied Internship (DAGD 340)	FSU-GR	3		
	DAGD 499	Capstone Course - Senior Project (Advisor Approval)	FSU-GR	3		
Required TOTAL HOURS: 57						

Application Domain – Students must complete ONE of the following six-course concentrations.						
General	DAGD 185	Digital Audio Production for Digital Media	FSU-GR	3	FSU-GR	
	DAGD 300	Game Design & Theory (DAGD 150)	FSU-GR	3	FSU-GR	
	DAGD 335	3D Modeling & Animation III - Rendering, Lighting, & Materials (DAGD 230)	FSU-GR	3	FSU-GR	
	DAGD 375	Advanced Modeling & Animation - Character (DAGD 335) or	FSU-GR	3	FSU-GR	
	DAGD 385	Advanced Modeling & Animation – Vehicle and Structure (DAGD 335)				
	DAGD 420	Digital Visualization & Simulation (DAGD 230) or	FSU-GR	3	FSU-GR	
DAGD 430	Digital FX (DAGD 335)					
3D Animation	DAGD 460	Multimedia Authoring II (DAGD 260, DAGD 300, DAGD 355)	FSU-GR	3	FSU-GR	
	DAGD 335	3D Modeling & Animation III - Rendering, Lighting, & Materials (DAGD 230)	FSU-GR	3	FSU-GR	
	DAGD 375	Advanced Modeling & Animation - Character (DAGD 335)	FSU-GR	3	FSU-GR	
	DAGD 385	Advanced Modeling & Animation – Vehicle and Structure (DAGD 335)	FSU-GR	3	FSU-GR	
	DAGD 430	Digital FX (DAGD 335)	FSU-GR	3	FSU-GR	
	DAGD 380	Digital Sculpting (DAGD 375)	FSU-GR	3	FSU-GR	
Game Development	DAGD	Advisor Approved Elective	FSU-GR	3	FSU-GR	
	SENG 101	Computer Programming 1 (SENG 100)	FSU-GR	3	FSU-GR	
	DAGD 300	Game Design & Theory (DAGD 150)	FSU-GR	3	FSU-GR	
	DAGD 320	Multiplayer Game Programming (SENG 101, DAGD300)	FSU-GR	3	FSU-GR	
	DAGD 420	Digital Visualization & Simulation (DAGD 230)	FSU-GR	3	FSU-GR	
	DAGD 460	Multimedia Authoring II (DAGD 260, DAGD 300, DAGD 355)	FSU-GR	3	FSU-GR	
Application Domain TOTAL HOURS: 18						

Electives

	Course Title			Cr	Grade
	DAGD Elective		3	FSU-GR	
	DAGD Elective		3	FSU-GR	
	DAGD Elective		3	FSU-GR	
Total Elective Hours: 9					

**** Transfer Students – 60 DAGD credit hours are required for Ferris B.A.S. Digital Animation & Game Design degree.**

General Education Requirements

Communication Competence—12 Credits Required				LCC course	cr	grade
COMM 121	Fundamentals of Public Speaking		3	SPCH 130		
ENGL 150	English 1		3	WRIT 121		
ENGL 250	English 2		3	WRIT/ENGL 122		
ENGL 311 or ENGL 321 or ENGL 325	Advanced Technical Writing Advanced Composition Advanced Business Writing	FSU-GR Class	3			
Scientific Understanding – 7 to 8 Credits Required - This requirement can be met with science courses in the following areas: Astronomy, Biology, Chemistry, Geology, Physical Science or Physics. In addition, GE 132-Physical Geography at LCC meets the four-credit lab science requirement. AS 102, CM 100, and BI 125 meet the three-credit science requirement.						
	Scientific Understanding Elective with Lab	LCC Lab Science	4			
	Scientific Understanding Elective (Lab or Non-Lab)	LCC	3 or 4			
Quantitative Skills 4 Credits Required - This FSU MATH 116 requirement can be completed as follows: (1) complete MA 107 and MA 108 LCC Courses, (2) pass the College Algebra and Trigonometry CLEP exam, or (3) complete a math course higher than FSU's MATH 116 (ex: MA 127, 129, 131, etc., at LCC). Additionally, the algebra component of FSU's MATH 116 is MA 107 at LCC. MA 107 can be completed as follows: (1) pass MA107 or higher (2) pass the college Algebra CLEP exam, or (3) an ACT Math subtest score of 24 or higher.						
MATH 116	Intermediate Algebra and Numerical Trigonometry		4	MATH 114 + MATH 115	4	
Cultural Enrichment – 9 Credits Required - Credits can be earned in one or more subject areas; however, one three-credit course must be at the 200 level or higher. Select from the following subject areas: Art, Art History, any foreign language (French, German or Spanish at LCC), History, Humanities, Literature, Music, Philosophy (but not Logic), or Theatre. In addition, the following specific LCC courses are accepted as cultural enrichment: PO104, SC241, EN247 and EN 249.						
	Cultural Enrichment Elective	G	REG	ARTS 131 (suggested)	3	
	Cultural Enrichment Elective	G	REG	ARTS 132 (suggested)	3	
	Cultural Enrichment Elective (200 level or above)	G	REG	THEA 120 (suggested)	3	
Social Awareness – 9 Credits Required - Subject areas include: Anthropology, Economics, Geography (but not Physical Geography; this course is considered a science elective), Political Science, Psychology or Sociology. Some LCC courses that satisfy this requirement include: AN210, EC 251 or EC 252, GE 135, PS 110, PY201 and SO251. Criteria: (1) One three-credit course must be 200-level or higher. (2) Must have two subject areas.						
	Social Awareness Elective	G	REG	ANTH 270 (suggested)	3	
	Social Awareness Elective	G	REG		3	
	Social Awareness Elective (200 level or above)	G	REG		3	
The University requires that one or more general education courses meet the Global Consciousness (G) and Race, Ethnicity and Gender (REG) criteria. Students can take one course that meets both the Global and REG requirement simultaneously. Some examples of LCC or FSU courses that can meet these criteria include:						
"G" Global and "REG" Race, Ethnicity and Gender Courses Under Social Awareness: ANTH 122 (ANTH 270 at LCC) – Introduction to Cultural Anthropology [G/REG] GEOG 100 (GEO 200 or 201 at LCC) – Geography of World Regions [G/REG] *PLSC 331 (PLS 260 at LCC) – Comparative World Governments [G/REG] *PLSC 341 (PLS 271 at LCC) – International Relations [G/REG] *FSU PLSC Courses are taught in Grand Rapids primarily during the Summer Semester.				Global Courses Under Cultural Enrichment: Any foreign language course from LCC HIST 152 (HUM 212 at LCC) – Western Civilization Since 1500 [Global only] HIST 373 (HIST 263 at LCC) – Twentieth Century Russia [Global only] MUSI 232 (MUSC 241 at LCC) – Introduction to Music Listening [Global only]		
REG Courses Under Cultural Enrichment: LITR 202 (ENG 260 at LCC) – Black Literature [REG only] PO 103 (PHOT at LCC) – Introduction to Photography [REG only]				Additional REG Courses Under Social Awareness: PLSC 121 (PLS 200 at LCC) – American Government 1 [REG only] PSYC 150 (PSY 200 at LCC) – Introduction to Psychology [REG only] PSYC 226 (PSY 205 at LCC) – Lifespan Human Development [REG only] PSYC 341 (PSY 221 at LCC) – Child Psychology [REG only] PSYC 342 (PSY 222 at LCC) – Psychology of Adolescence [REG only] SOCY 121 (SOCL 120 at LCC) – Introductory Sociology [REG only] SOCY 122 (SOCL 255 at LCC) – Social Problems [REG only] SOCY 340 (SOCL 260 at LCC) – Minority Groups in America [REG only]		
Reviewed July 2010 - db						
A Minimum of 41 General Education Hours Required for FSU B.A.S. Degree						

Background: B.A.S., Digital Animation and Game Design (DAGD) is designed as a multidisciplinary degree. Disciplines covered include 3D animation, programming, design, and business. Likely participants will have a desire for careers in animation, design, simulation, and programming. The digital animation concentration builds on the existing B.A.S. format. This format includes a required concentration for depth, an elective section that offers greater breadth in the discipline area, and general education requirements targeted toward courses serving employees in digital technology.

Entry into the Program: The Digital Animation & Game Design, B.A.S. is a course-specific degree completion program with a four-year sequence that begins promptly upon acceptance and enrollment. It is expected that students entering this technology intensive program already have solid foundation skills in dealing with personal computers (PC's). Individuals are encouraged to enter the program as a first-year student and be dually enrolled with Lansing Community College. Dual enrollment requires a student to be admitted to Lansing Community College and register there for the appropriate FSU-equivalent courses in this degree. Once accepted into the program, students are expected to enroll in FSU's Digital Animation courses. A completed Associate Degree is not required to be admitted. While students with earned college credit may apply to the program, students are encouraged to apply as a freshman/first-year student. Students interested in the degree should set up an advising appointment with the DAGD advisor. ** Financial aid is available for dually enrolled students.

NAME: _____ SS#: _____ DATE: _____ ADVISOR: _____

Admission Requirements:

1. Recent high school graduates need an ACT composite score of 19 and a high school grade point average of 2.50 (on a 4.0 scale).
2. Students transferring from another college should refer to www.ferris.edu and choose "Transfer Student" from the "Quick Links" pull-down menu to review Ferris' policy regarding admissions criteria for transfer students.
3. All courses transferred into Ferris must be "C" or higher including courses used in the DAGD required core and recommended electives. Students with an Associate's Degree can transfer a general education course(s) with less than a "C" grade.
4. Student must submit a portfolio for departmental review to be evaluated for acceptance into the program.

Graduation Requirements:

1. To graduate, students must have a 2.0 CUMULATIVE GPA in all courses and a 2.50 CUMULATIVE GPA in REQUIRED DAGD classes.
2. Students must meet the University General Education Credit Requirements listed above.
3. A minimum of 124 credit hours is required for graduation.

Financial Aid:

1. To be considered for financial aid from Ferris, students must take at least six credit hours from FSU each semester. The financial aid process begins with filing a FAFSA application at www.fafsa.ed.gov and entering FSU code #002260. Ferris has a financial aid consortium agreement with LCC. The combined classes from Ferris and LCC can be used in determining the student's financial aid eligibility. A student cannot receive financial aid from two different schools at the same time; an aid package will originate from Ferris for classes taken at both schools. To have a financial aid application processed for an aid package, each semester a LCC/GR Technology Center Consortium Form must be completed and returned to our Ferris-Grand Rapids offices. Consortium Forms are available from Ferris-Grand Rapids online at www.ferris.edu/admissions/financialaid/conagree/htm.

Course Descriptions

Foundation	DAGD 101	2D Visualization – Storyboards & Style Guides Foundations of two-dimensional graphic communication are explored in what is primarily a traditional media (pen and paper) and design course. Students will learn and demonstrate fundamental design concepts, research ideas for visualization, create and manipulate images for presentation, develop concept art for production, and compile elements into a presentable format.
	DAGD 102	Story Development for Film & Gaming This course explores the basics of storytelling and screenwriting. Topics included are the Hero's Journey, character development, beat outlining, concept pitching, and conversations with industry professionals. Students will be required to read supporting material, view media for discussion, create and pitch story concepts, and develop a final screenplay.
	DAGD 103	3D Visualization – 3D Drawing & Sculpture This course covers the fundamentals of creating a 3D project. Topics included are 3d computer applications, 2d visualization and drawing, traditional modeling techniques, spatial design, temporal influence, development tools, image and animation formats, and delivery solutions.
3D Animation & Visual FX	DAGD 100	3D Modeling & Animation I - Introduction to Computer Animation Students use animation techniques to articulate and communicate sales reports, point of purchase displays, an information video, cartoon or a process simulation. Using computer animation software, students work with timing effects, from manipulation, color cycling, film loops, palette transitions, sound files and animation components.
	DAGD 230	3D Modeling & Animation II - Modeling & Animation (DAGD 100) Students use 3D modeling and animation to articulate and communicate ideas and concepts. Students produce a series of fully rendered 3D animated models. Using 3D modeling software, students work with timing, effects, creation of 3D objects from a 2D plane, materials editing, reflection mapping, and various other 3D operations.
	DAGD 335	3D Modeling & Animation III - Rendering, Lighting, & Materials (DAGD 230) This course is a study of computer rendering, lighting, and materials. Topics include techniques for light, shadow, texture, composition, materials and their proper use.
	DAGD 375	Advanced Modeling & Animation - Character (DAGD 335) This course covers advanced issues in 3D computer graphics. Topics included are modeling, texturing, rigging, animation, and 3D character development.
	DAGD 380	Digital Sculpting (DAGD 375) This is an advanced course in digital modeling, sculpting, and texturing for animation and game design.
	DAGD 385	Advanced Modeling & Animation – Vehicle and Structure (DAGD 335) This course emphasizes advanced modeling, texturing, and animation techniques for rigid body objects such as vehicles and buildings.
	DAGD 430	Digital FX (DAGD 335) This is an advanced course exploring techniques for creating Digital FX with a focus on merging 3D and live video.

Gaming	DAGD 150	Introduction to Game Design & Development This course covers foundations in designing and making interactive software. Explore the entire game creation process to develop a successful game. Topics included are brainstorming, story boarding, scripting, game balancing, player motivation, level design, non-linearity, input/output, play testing, interactive game history and types of games.
	DAGD 300	Game Design & Theory (DAGD 150) The process of game design is studied along with the production models involved in developing digital games. Students develop and present design concepts and design documents. Students will explore various game engines and platforms and have the opportunity to develop original and applied games.
	DAGD 310	User Interface Design (DAGD 150, GRDE 216, DAGD 260) An introduction to the concepts and practices associated with user interface and input/output devices. Students will design and develop a user interface as their final project.
Multimedia Application	DAGD 260	Multimedia Authoring I This course covers the fundamentals of creating a multimedia project. Topics included are multimedia design, interface development, screen navigation, game play, scripting, development tools, audio integration, image and animation formats, and delivery solutions.
	DAGD 420	Digital Visualization & Simulation (DAGD 230) This course is a study of applied animation for digital visualization and simulation. Students will develop animation projects based on real-world models and events. Topics include scientific visualization, legal simulation, and manufacturing processes.
	DAGD 460	Multimedia Authoring II (DAGD 260, DAGD 300, DAGD 355) Advanced topics in multimedia production are explored with an emphasis on creating a substantial interactive project.
Web & Digital Imaging	GRDE 216	Electronic Imaging Students will apply design principles to digital photography. An intermediate level of digital image manipulation; photo collage; use of masks, layers, filters, channels, and color systems will be taught.
	GRDE 226	Webpage Design (GRDE 216) Introduction to HTML and web authoring software. An intermediate level of page layout for the web will be explored including site mapping, creation, navigation, and management.
Programming	SENG 100	Introduction to Computer Programming This course teaches fundamentals of computer programming. Students learn how to write, test and debug small programs. Basic coding concepts and best practices are discussed and explained. Functions, data types, logical constructs required to produce software solutions will be the basis for this exploration. . Covers popular methodologies being used in the real world and examines the merits of each. Students are introduced to Software Development Life-Cycles.
	SENG 101	Computer Programming I (SENG 100) This course teaches fundamentals of computer programming. Students learn how to write, test and debug small programs. Basic coding concepts and best practices are discussed and explained. Functions, data types, logical constructs required to produce software solutions will be the basis for this exploration.
	DAGD 320	Multiplayer Game Programming (SENG 101, DAGD300) This course explores writing games that play across the internet, intranet, and network, focusing on online gaming technology.
Digital Video	DAGD 180	Digital Video Editing (GRDE 216) This course covers the fundamentals of constructing and editing a digital-based video. Topics included are cinematography, video storytelling techniques, pacing, editing, compression/decompression techniques (codecs), video file formats, soundtracks and sound effects, title screens and overlays, menu systems, and DVD authoring.
Business	APPS 301	Project Management Students use Project Management techniques to successfully plan, schedule, and manage projects.
	BLAW 321	Contracts & Sales Provides an introduction to the law and the legal system in the U.S. as well as a thorough examination of the law of contracts and sales. (Includes a review of articles 2 and 6 of the Uniform Commercial Codes.)
	MKTG 321	Principles of Marketing Introduction to the basic functions of marketing. Included as topics of study are: consumer behavior, marketing research, marketing planning, physical distribution, selling, promotion, retailing, pricing, wholesaling, purchasing, international marketing, and e-commerce.

Professional Development	DAGD 220	Sophomore Portfolio (DAGD 100, GRDE 216) This course introduces students to the concepts and practices associated with the preparation of portfolio creation. During this course students have the opportunity to enhance their design skills by developing a visual identity. Multimedia career development, resume building, and industry research will also be addressed.
	DAGD 340	Junior Project (DAGD 220, DAGD 230, DAGD 335) This course will require students to prepare a successful animation from concept to completion.
	DAGD 491	Applied Internship for Digital Animation (DAGD 340) This course is intended to be completed between the Junior & Senior year. The internship shall be setup and approved by means of a internship contract, including approval by the University & employer in a related animation field.
	DAGD 499	Capstone Course - Senior Project (Advisor Approval) This course will focus on helping each student prepare a commercially marketable final project portfolio. Students will explore employment opportunities including seeking a posted position, working freelance, and establishing a business.

Proposed Course Schedule Breakdown by Semester

Freshman Year

First Semester

- DAGD 150 Introduction to Game Development
- DAGD 103 3D Visualization
- GenEd (Cultural Enrichment – Arts 102 at LCC)
- GenEd (MATH 107 at LCC)
- SENG 100 Intro to Computer Programming (CITP 110 at LCC)

Second Semester

- DAGD 180 Digital Video (DMAG 130 or ARTS 242 at LCC)
- GenEd (MATH 118)
- GRDE 216 Electronic Imaging (ARTS 171 at LCC)
- GenEd (Cultural Enrichment - ARTS 132 at LCC)
- MKTG 321 Principles of Marketing (MKTG 200 at LCC)

Summer Semester

- GenEd (WRIT 121)

Sophomore Year

First Semester

- DAGD 100 3D Modeling & Animation (ARTS 234 at LCC)
- DAGD 101 2D Visualization – (ARTS 226 at LCC)
- DAGD 260 Multimedia I
- DAGD 102 Story Development for Film & Gaming
- GenEd (Cultural Enrichment – ARTS 232 at LCC)

Second Semester

- BLAW 321 Contracts & Sales (LG 215 at LCC)
- DAGD 230 3D Modeling & Animation II
- GenEd (Science w/ Lab at LCC)
- GRDE 226 Webpage Design (ARTS 173 at LCC)
- GenEd (Social Awareness at LCC)

Summer Semester

- GenEd (ENGL 122)

Junior Year

First Semester

- DAGD (Domain)
- DAGD 310 User Interface Design
- DAGD 335 3D Modeling & Animation III or Game Domain
- DAGD (Elective)
- APPS 301 Project Management

Second Semester

- DAGD 340 Junior Project
- DAGD (Domain)
- DAGD (Elective)
- GenEd (Science)
- DAGD 220 Sophomore Portfolio

Senior Year

First Semester

- DAGD (Domain)
- DAGD (Domain)
- DAGD (Elective)
- GenEd (Social Awareness at LCC)
- DAGD (Domain)

Second Semester

- DAGD 499 Capstone Course - Senior Project
- DAGD domain
- GenEd (Social Awareness 200+ at LCC)
- English 3xx at FSU

Summer Semester

- DAGD 491 Applied Internship

For More Information

For answers to your questions, contact us at:

Phone: 616.451.4777 or 800.998.3425

Fax: 616.451.4740

E-mail: fsugr@ferris.edu

Website: www.ferris.edu/offcampus

Students interested in the B.A.S., Digital Animation and Game Design program should set up an advising appointment with the advisor using the contact information above.

Ferris State University – Grand Rapids

151 Fountain Street NE

Grand Rapids, MI 49503