

Course Description

DIG2370 | Character Modeling & Rigging | 4.00 credits

This course focuses on the modeling and rigging of characters for performance. The student will solve complex issues of character articulation with an emphasis on skeleton, skin, and binding techniques. Prerequisite: DIG1302

Course Competencies

Competency 1: The student will demonstrate knowledge of rigging by:

- 1. Defining rigging as a process
- 2. Defining the role of a rigger
- 3. Identifying rigging creation in the production pipeline
- 4. Demonstrating an understanding of the joint weighting process
- 5. Creating a rig with the proper hierarchical structure of goals and nulls to construct effective control objects

Competency 2: The student will demonstrate knowledge of advanced rigging by:

- 1. Utilizing advanced rigging tools
- 2. Preparing a rigged model for animation
- 3. Creating complex rigs for greater precision and control
- 4. Creating deformers

Competency 3: The student will demonstrate knowledge of basic character setup by:

- 1. Comparing and contrasting rigging approaches and styles
- 2. Creating a rig using industry standard bone/joint hierarchies and naming conventions
- 3. Applying controllers to rig
- 4. Applying IK (Inverse Kinetics) splines and chains
- 5. Creating a visual selector for the rig

Competency 4: The student will demonstrate knowledge of advanced modeling by:

- 1. Modeling a highly detailed biped character in a 3D application
- 2. Creating a model mesh suitable for rigging
- 3. Creating blend shapes

Learning Outcomes:

- Solve problems using critical and creative thinking and scientific reasoning
- Use computer and emerging technologies effectively
- Demonstrate an appreciation for aesthetics and creative activities

Updated: Fall 2025