

*Instructional Model:*

**Teacher Led**

**Engaged Learning**

**Project Based Lessons**

*Course Category:*

**Graphic Design**

*Minimum Grade Level:*

**7th Grade**

*Prerequisites:*

**Programming 111 or  
comparable experience**

*Programming Language:*

**GodotScript**

*Software used in Course:*

**Godot**

*Technology Options:*

**Mac**

**Windows**

## COURSE DESCRIPTION

Educators excite student interest in computer science by leading discussions and projects based on real-world applications, ethical behavior, and careers within the gaming industry. Students use Godot to order and code interactions between provided assets to create playable video games.

## STANDARDS COMPLIANCE

- 100% national and state computer science standards alignment - standards map provided
- Reinforces Math, ELA, and Social-Emotional Learning competencies

## STUDENT OUTCOMES

Each lesson plan is designed to achieve specific student outcomes related to computer science competencies.

Sample outcomes for this course include:

- Understand the hierarchy of node/tree structures central to game development.
- Identify and explain how to deal with suspicious websites through discussions with classmates.
- Understand and use variables when developing parameters in the game.
- Collaborate with others to debug their game.
- Apply software planning concepts.
- Identify and explain the roles and skills necessary to be a Network Administrator.

### RESOURCES INCLUDED

- Teacher Training videos
- Summative Assessments
- Formative Assessments
- Syllabus
- Computer science standards compliance mapping
- Full year of step-by-step lesson plans
- Pacing guide
- Vocabulary words and definitions
- Coding activities
- Unplugged activities
- Digital citizenship activities
- Hardware activities (Optional)

### PILLARS OF ENGAGEMENT



#### **CODING** *visual*

Codelicious engages visual learners with computer-based projects, vocabulary activities, as well as written and visual imagery, while building foundational and advanced computer science skills.



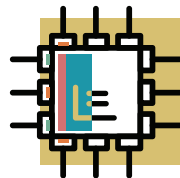
#### **UNPLUGGED** *kinesthetic*

Designed to be conducted off-line with creative activities or movement, Codelicious leverages unplugged activities to reinforce computer science concepts.



#### **DIGITAL CITIZENSHIP** *auditory*

With discussions, collaboration sessions, and student presentations, Codelicious provides computer science curriculum that enables the auditory learner to thrive.



#### **HARDWARE** *tactile*

Hands-on learning with Codelicious curriculum builds upon computer science principles through hardware projects, problem solving activities involving everyday materials, and real-world applications.