PATHWAY COURSES

Level 1

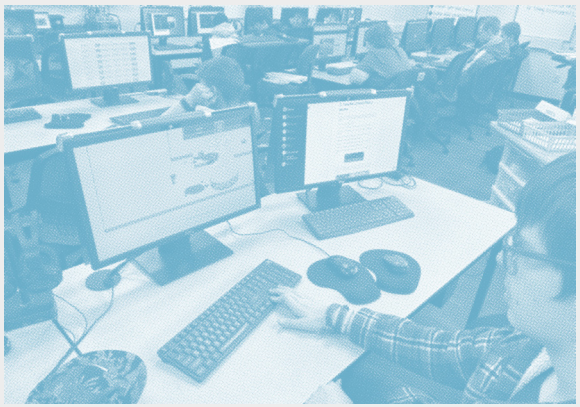
DIGITAL GAME DEVELOPMENT I

Level 2

DIGITAL GAME DEVELOPMENT II

Level 3

DGD ADVANCED STUDIES



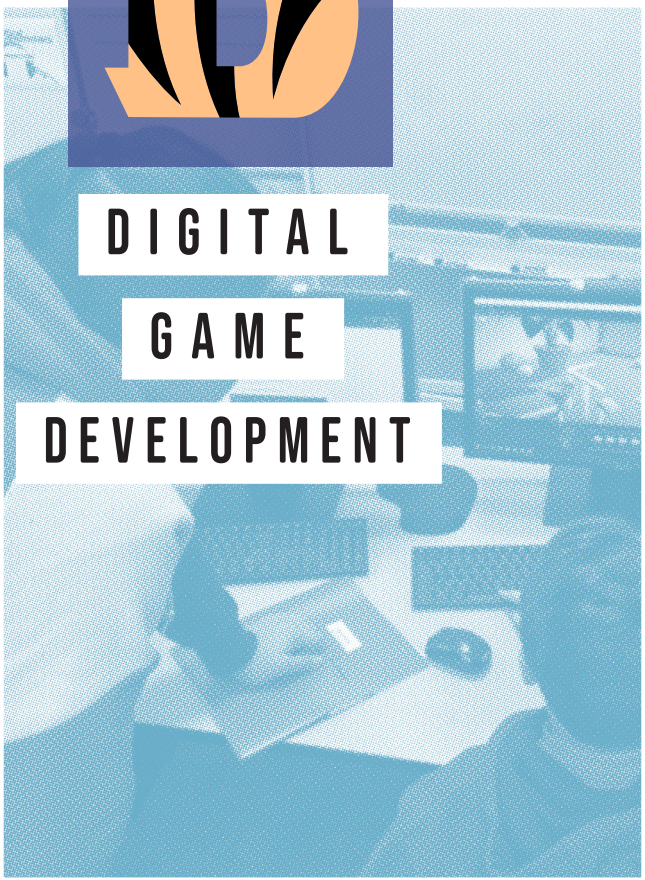
RESOURCES

NDE - CTE
doe.nv.gov/cte/programs/information-and-technology/

CTE™

DOUGLAS COUNTY SCHOOL DISTRICT

DIGITAL GAME DEVELOPMENT



The Digital Game Development program provides students with the principles of game mechanics. Areas of study include programming, story and character development, and artistic theory and concepts to develop a game.

DOUGLAS HIGH SCHOOL
1670 HWY 88
MINDEN, NEVADA 89423

INDUSTRY CONNECTIONS

LEVEL 1

DIGITAL GAME DEVELOPMENT I

This course is designed to introduce students to the elements and structure of game programming and design. The areas of major emphasis in the course are:

- *game methodology*
- *programming*
- *game genres*
- *game theory*
- *2D and 3D interactive experiences*
- *immersive environments*

Students will apply both creative and technical skills in various guided projects. No experience needed for this course.

LEVEL 2

DIGITAL GAME DEVELOPMENT II

This course is a continuation of Digital Game Development I. This course provides intermediate digital game development students with instruction in advanced techniques and processes. The major areas of emphasis in the course will be:

- *development of characters*
- *immersive environments*
- *different genres*
- *exploration of multi-player games*

Students will apply both creative and technical skills to design and refine projects in addition to implementing the adventure.

LEVEL 3

DGD ADVANCED STUDIES

Students are expected to work independently or with a team and consult with their supervising teacher for guidance on a self-selected game development project.

CAREERS ASSOCIATED WITH GAME DEVELOPMENT:

- **Video Game Developer**
- **Animator, Programmer**
- **Game Tester, Gaming Designer**
- **Technical Artist**
- **Game Artist**
- **App Developer**
- **Project Manager**

Throughout this pathway, students can expect to gain experience and exposure to a variety of industry standard hardware and software, including:

- **Drawing Tablets**
- **Oculus VR devices**
- **High powered graphics rendering stations**
- **Raspberry Pi microcomputers**
- **Unity Game Engine**
- **Blender graphics software**