

Computer Science III Video Game Design

Local Course #: 82343

State Course ID: 3580350

Course Description:

This advanced course in computer science centers on the exciting field of video game design, with a focus on utilizing Unreal Engine, a leading industry tool. Students will enhance their creativity and innovation by designing, implementing, and presenting meaningful video game projects. Through hands-on experiences, they will collaborate with peers and instructors to solve complex challenges using advanced computer science concepts. The course emphasizes the importance of data analysis, task planning, and selecting the appropriate technologies for game development. Students will develop and apply their skills in areas such as game mechanics, 3D modeling, and interactive storytelling, while also learning about digital citizenship, including the ethical use of technology and adherence to current laws and regulations. By mastering advanced data structures and technology operations, students will be well-prepared for careers in game design and software development.

This course counts as a Language Other Than English (LOTE) credit and receives Advanced Placement (AP) weight in GPA calculations

Link to TEKS:

[https://texas-sos.appianportalsgov.com/rules-and-meetings?\\$locale=en_US&interface=VIEW_TAC_SUMMARY&queryAsDate=08%2F08%2F2025&recordId=225617](https://texas-sos.appianportalsgov.com/rules-and-meetings?$locale=en_US&interface=VIEW_TAC_SUMMARY&queryAsDate=08%2F08%2F2025&recordId=225617)

First 9 Weeks Major Topics:

Foundational concepts of building a video game.

Second 9 Weeks Major Topics:

Function over Form, the importance of a program working over what it looks like.

Third 9 Weeks Major Topics:

Inheritance, how to create parent and children classes to make more advanced games easier.

Fourth 9 Weeks Major Topics:

Creating persistent data that can be used to store game data and carry it between levels.