



**Section I: Action**

The three graduate emphases being proposed are:

* The School of Computing proposes to offer a graduate emphasis in Game Engineering within the existing Master of Computing degree.
* The Department of Film and Media Arts proposes to offer a graduate emphasis in Game Production within the existing Master of Fine Arts degree.
* The Department of Film and Media Arts proposes to offer a graduate emphasis in Game Arts within the existing Master of Fine Arts degree.

Entertainment Arts and Engineering (EAE) is the overarching term we use to describe the interdisciplinary work between the School of Computing and the Department of Film and Media Arts in the areas of video games, computer animation, special effects, etc. A key feature of EAE is its interdisciplinary nature. Students from both departments work closely together throughout their academic careers. This partnership of engineer and artist reflects the state of the entertainment business world where artists and engineers constantly work together on a daily basis. In 2010, an undergraduate emphasis in EAE was approved for bachelor’s degrees in each department.

In the fall of 2010, a graduate version of EAE was created focusing on video games. This program was titled Entertainment Arts and Engineering: Master Games Studio (EAE:MGS). EAE:MGS is designed to provide master's level students with an education to be successful in the game industry, both immediately and into the future as the industry continues to evolve. The academic experience includes an intense focus on industry application that incorporates both theory and research. There are three emphases - ***Game Engineering***, ***Game Arts*** and ***Game Production***. Students in the game engineering emphasis are awarded the MS in Computing degree from the School of Computing, while students in the game arts and production emphases are awarded the MFA degree from the Department of Film and Media Arts.

The curriculum is designed in a pure cohort model of four semesters spread over two years. During each of the first three semesters, all students take two joint classes (each is 3 credits). The design classes provide all students with the theoretical and practical understanding of video games. The project classes begin with learning how to rapidly prototype games and conclude with a large-scale, two-semester, large-team project.

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| ***First Fall Semester*** | ***First Spring Semester*** | ***Second Fall Semester*** |
| Game Design I  | Game Design II | Game Design III |
| Game Project I | Game Project II | Game Project III |

Also, during those three semesters, students take emphasis specific classes. Students in the School of Computing Game Engineering emphasis take game engineering classes which instruct students in the technical aspects of video games from game engines to graphics, artificial intelligence, and novel input devices (all are 3 credits):

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| ***First Fall Semester*** | ***First Spring Semester*** | ***Second Fall Semester*** |
| Game Engineering I | Game Engineering II | Game Engineering III |

Students in The Department of Film and Media Arts Game Production emphasis take three production classes that teach how to run a team, the game production pipeline, testing strategies, employee contracts and the business of games. They are also expected to take three graduate elective courses in Film and Media Arts plus Intro to Graduate Studies.

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| ***First Fall Semester*** | ***First Spring Semester*** | ***Second Fall Semester*** |
| Game Production I (3) | Game Production II (3) | Game Production III (3) |
| Elective (4) | Elective (4) | Elective (4) |
| Intro to Graduate Studies (1) |

Students in The Department of Film and Media Arts Game Arts emphasis take three arts classes that focus on fundamental consideration for the look of games through 3D modeling and character animation. They are also expected to take three graduate elective courses in Film and Media Arts plus Intro to Graduate Studies:

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| ***First Fall Semester*** | ***First Spring Semester*** | ***Second Fall Semester*** |
| Game Arts I (3) | Game Arts II (3) | Game Arts III (3) |
| Elective (4) | Elective (4) | Elective (4) |
| Intro to Graduate Studies (1) |

In the final spring semester, all students do an internal or external internship (9 credits) and a take class to write a research paper (3 credits).

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| ***Second Spring Semester*** |
| Internship  |
| Research Paper |

School of Computing students will take at least 39 credit hours and Department of Film and Media Arts students will take at least 52 hours.

**Section II: Need**

This program has an industrial advisory board of leading members of the video game business with members from inside and outside of the state of Utah representing large and small video game companies. The advisory board members have indicated that students who graduate with Master’s degrees will be highly sought after. They also say that the “branding” as provided by the proposed emphases provides future employers with a mechanism to easily identify future employees. They see these EAE:MGS graduates entering the workforce as individuals who are highly prepared and have the specific skills employers desire. Colleagues at other universities offering similar master’s programs have told us that even non-video game employers highly value the skills exhibited by students graduating from their programs.

**Section III: Institutional Impact**

The institution will gain approximately 50 new graduate students per year when the program is fully operational.  The departments involved will take on some additional administrative tasks.

**Section IV: Finances**

The current financial impact on the School of Computing and the Department of Film and Media Arts is equivalent to two FTE staff and associated administrative support from each sponsoring department. Long-term, the emphasis will be supported primarily through a combination of differential tuition and student credit hour funding that will become the basis for permanent funding, the details of which will be determined by the office of the Associate Vice President for Budget and Planning in concert with the sponsoring departments.