

# **Master of Science and Engineering in Computer Graphics and Game Technology (CGGT)**

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# CGGT Program

- Who is it for?

- People interested in working at a
  - game company
  - computer animation studio
  - special effects shop
- Recent graduates
- People already in industry

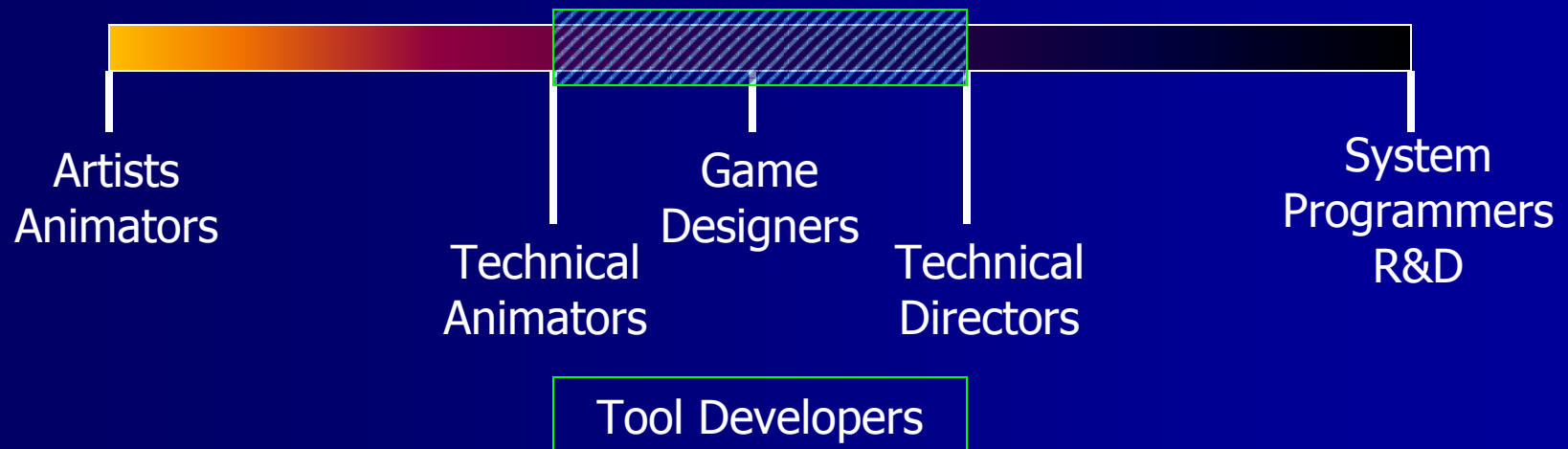
# CGGT Program

- What do you need to be admitted?
  - Undergraduate Degree in Computer Science or Engineering
  - Passion for graphics and animation from both a creative and technical point of view

# CGGT Program

- Focus of CGGT Program

- Middle of Creative Spectrum



# CGGT Program

## ■ Curriculum

- 1 year to MSE degree
  - fall, spring and summer semesters
- 10 courses
- Main Areas of Study
  - Creative Arts and Design
  - Communications
  - Computer Science, Systems and Technology
  - Business and Entrepreneurship

# CGGT Program

- Creative Arts and Design (1)
  - Typical Courses
    - 3D Modeling
    - Figure Modeling
    - 3D Animation
    - Digital Film Production
- Communications (1)
  - Visual Communications

# CGGT Program

- Computer Science, Systems and Technology (5)
  - Required Courses
    - Computer Graphics
    - Computer Animation
    - Advanced Graphics and Animation
    - Math
  - Technical Elective Course
    - Game Design and Development
    - GPU Programming
    - AI
    - Physically-Based Animation (also satisfies Math requirement)
    - Software Agents
    - Independent Research/Study
    - Any other course offered at SEAS

# CGGT Program

- **Business and Entrepreneurship (1)**
  - Engineering Entrepreneurship
  - Product Design
- **Free Elective (1)**
  - Any Graduate-Level Course (500 or above) at the University
- **Game Design Practicum (1)**
  - Group Game Project

# CGGT Program

- **Where do you go from here?**
  - Many companies in the Computer Game and Animation industries hire CGGT graduates, including:
    - Pixar, Disney, Dreamworks,...
    - EA, Activision, Namco, Crystal Dynamics, Zynga...
    - nVidia, Intel, Microsoft, ...
    - Many other smaller animation and game development studios
- **How do you apply?**
  - [www.cis.upenn.edu/grad/cggt](http://www.cis.upenn.edu/grad/cggt)